

# MANUFACTURERS' RECORD

A Weekly Southern Industrial and Hardware Newspaper.

VOL. XVI. No. 3.  
WEEKLY.

BALTIMORE, AUGUST 24, 1889.

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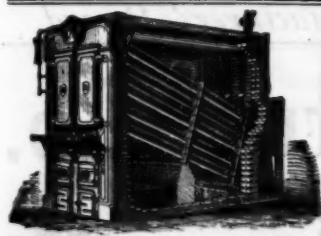


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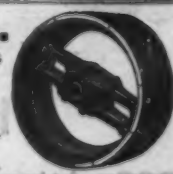


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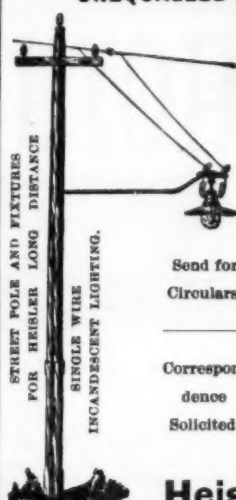
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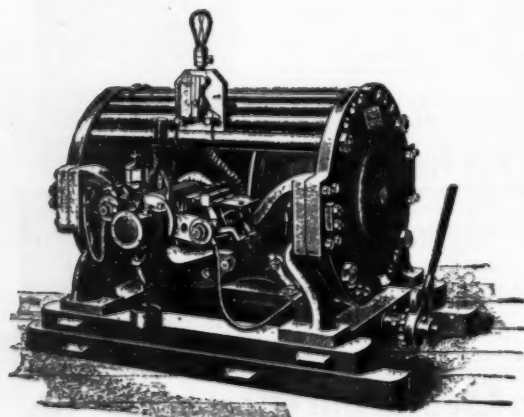
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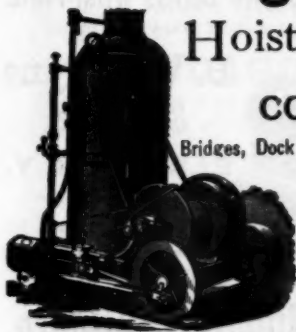
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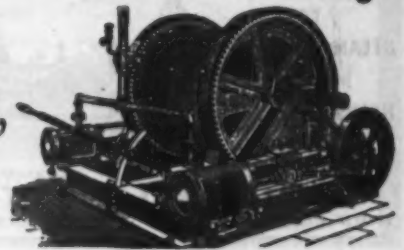


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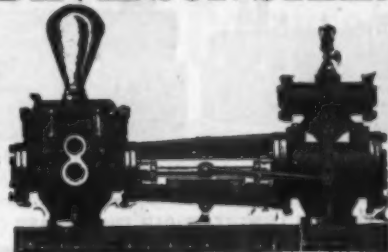
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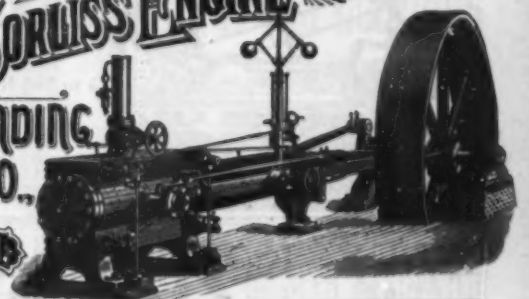
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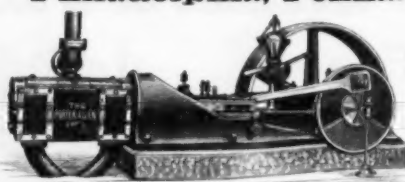
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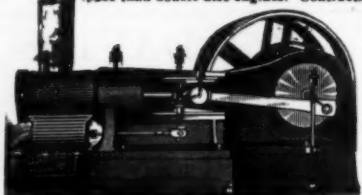
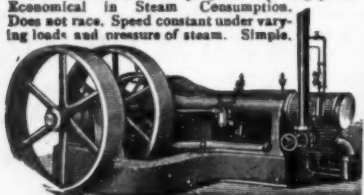
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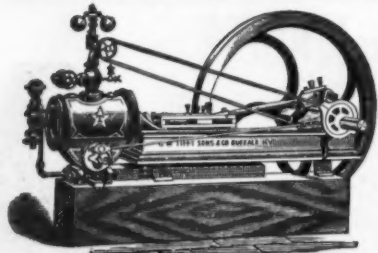
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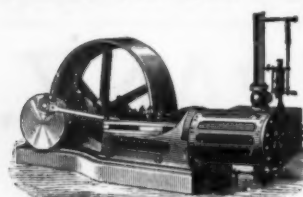
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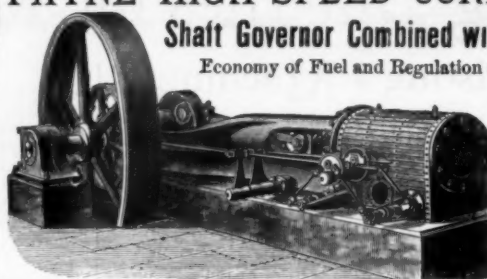
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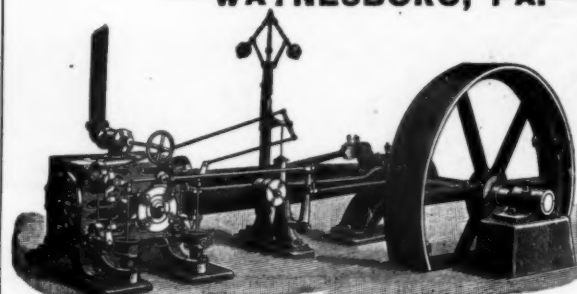
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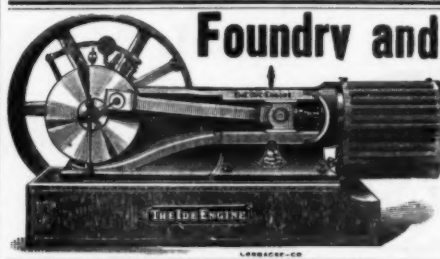


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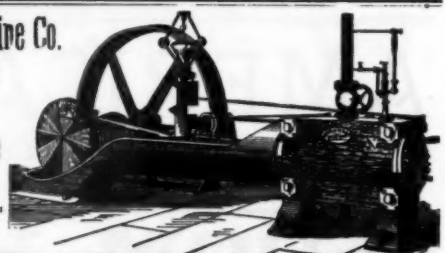
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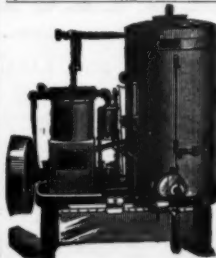
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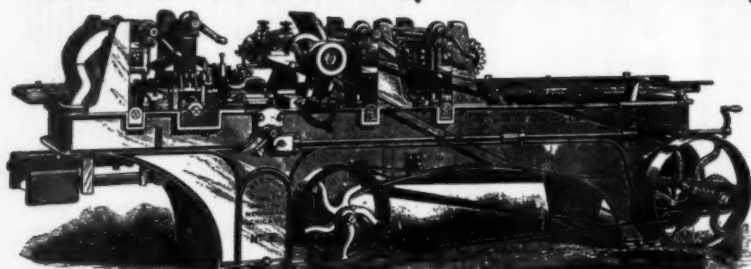
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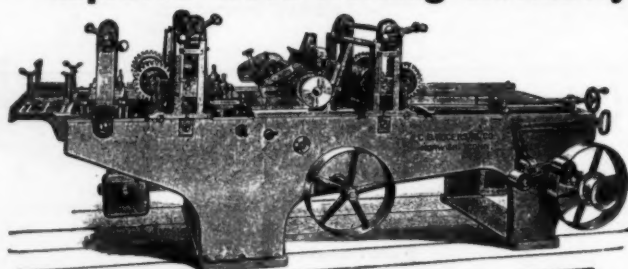
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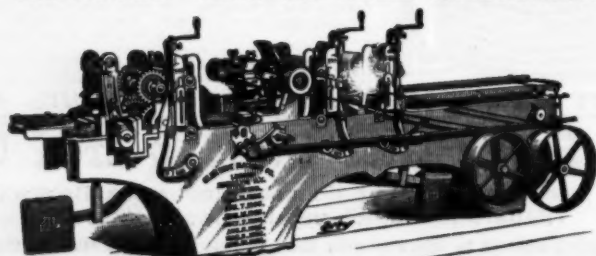
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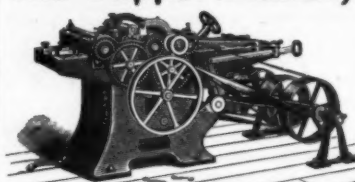
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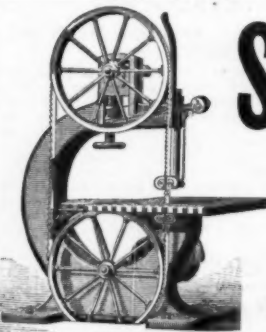
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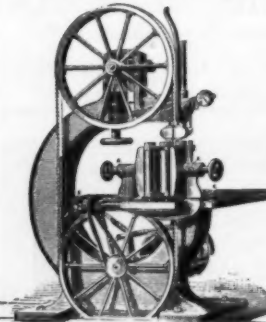


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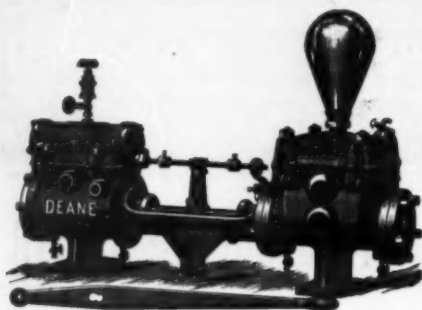
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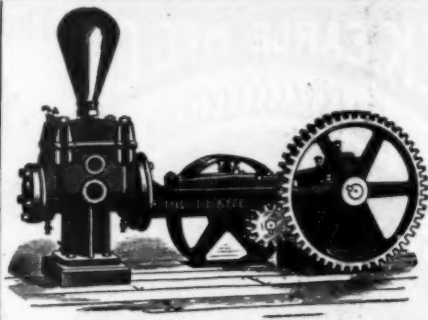
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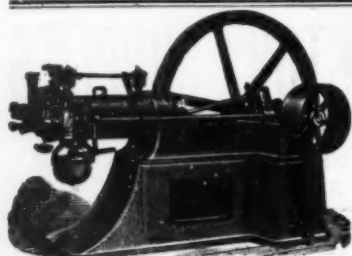
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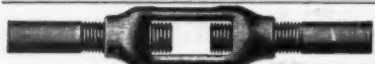
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BALTIMORE, AUGUST 24, 1889

Why not subscribe for the MANUFACTURERS' RECORD? Price \$4 per year or six months for \$2.

THE Philadelphia Press keeps up its brilliant attempts to be witty by misrepresenting the South. It is a question whether stupidity or malice prompts its efforts in that direction, but we incline to the latter. In a late issue it said:

Georgia is making vigorous efforts this year to raise enough corn to supply her needs, something she has never yet succeeded in doing. Her chief difficulty heretofore has been that she converted too much of her corn into moonshine whiskey, and too little into griddle cakes and pone.

Georgia raised last year 28,069,000 bushels of corn, or an average of 10.8 bushels per capita, based on her population at the last census, while Pennsylvania raised 45,414,000 bushels, or 10.6 bushels per capita. In other words, in proportion to population, Georgia raised more corn than Pennsylvania. Georgia had at the time of the census \$106,000 invested in the manufacture of liquors of all kinds, while Pennsylvania had \$14,270,000. Pennsylvania does not raise near enough corn to supply its own wants.

SOME time ago a Baltimorean invented a patent stopper, called a bottle seal, to take the place of corks and other patent stoppers. It looked like a very small thing, but it had merit; and instead of proving to be a small thing it has, like many other little things, proved to be a bonanza. It has already met with such a demand, and is paying such big dividends, that the company owning the patents has purchased the immense factory recently built by the Baxter Electric Motor Co., one of the largest buildings in the city, which probably cost at least \$75,000 to \$100,000 to erect. As small as it looks, a prominent business man, Mr. Samuel G. B. Cook, has gone to Europe to dispose of the patents for England and the Continent, and it is expected that the sale will yield a very large fortune to those interested. It is often the little things that yield the largest returns.

If our booming friends of Trenton and Dade county want a paper that keeps up with the times of the South they should send for the Baltimore MANUFACTURERS' RECORD. It is a friend to every nook and corner of the South.—Dade County (Ga.) Times.

**The Completion of the Cumberland Gap Tunnel.**

The practical completion of the Cumberland Gap tunnel marks one of the most important events in the industrial and railroad history of the South—an event that is destined to have far greater influence upon the future of this whole section than its projectors even probably fully understood when they first undertook the enterprise. It opens up a gateway between the Northwest and the central South, and makes practicable the active development of one of the finest mineral and timber regions in the world. This great tunnel is the work of English capitalists acting through Mr. A. A. Arthur, of Knoxville, Tenn.

For years Cumberland Gap has been one of the noted points of the South, but no railroad had ever penetrated the vast region which is now brought so prominently before the public.

In this virgin country, where coal, minerals and timber are found in such abundance, and where the proximity of ores and coking coal indicate that it is possible to make iron at prices fully as low as the most favored point in Alabama, and where steel making ores are in easy access, there is now going on a transformation which is somewhat startling. The country is filled with prospectors looking for mineral and timber lands. A great industrial city is being laid out and pushed with astonishing vigor. American capital is rapidly following the lead of English money, and while Middlesborough, projected by Englishmen, promised to be an English town, the rush of American men and money there bids fair to evenly divide the honors between the two countries.

Here is a new town at the Kentucky side of this great tunnel, started in a county which for generations has been one of the most noted mountain counties of Kentucky, where there were fewer evidences of civilization even than in almost any other part of this country. This town is to revolutionize that section. It is hardly laid out yet, but it already has two banks, a newspaper, half a dozen churches projected or building, and enterprises of every character contracted for, from furnaces and steel rail mills to the minor industries, representing an aggregate capital of fully \$10,000,000.

In all America there is no finer country than that of Eastern Kentucky, Southwest Virginia and East Tennessee, and these three States meet at this point, the stone which marks their dividing lines being directly over this tunnel. It is a country of splendid climate, of almost boundless mineral and timber wealth, and offers attractions as a place of residence as well as for industrial enterprises rarely equalled. The construction of Cumberland Gap throws this great country open to the world.

Subscribe to the MANUFACTURERS' RECORD.

**Mutual Insurance for Cotton Mills.**

The co-operation of mill owners for insurance purposes has proved a great success, and several lines of manufactures now have their own companies. These companies have served a two-fold purpose. They have insured the factories, and they have demanded precaution against fire, hence have assured greater protection to the lives of the operatives. Or, to put it in other words, these mutual companies have reduced the insurance business to a science by taking only risks that are satisfactory. If a mill owner or corporation seeks admission into one of these companies, the mill is examined to see if it is well arranged to prevent conflagration, and if it is not, it must be so arranged before it can be accepted.

Mr. Edward Atkinson, who is president of several of these mutual companies, relates an incident to illustrate the policy of mutual companies. The owner of a jute factory applied for mutual insurance. His factory was a stone building, with bare walls inside and with the ceilings finely sheathed. Sixty feet away was a flax factory, and twice as far were locomotive works. These works also applied for insurance. They regarded themselves as a first-class risk, but were rejected owing to the faulty construction of their building. Among the things necessary for the jute factory to do to secure insurance was the removal of the sheathing, and it was removed under protest. In the interspace were several tons of very inflammable lint. Within a year the locomotive works, which the owners regarded as so good a risk that they could not burn, were burned, and the flax factory went with them; but the jute factory, which had taken scientific precautions against fire, was saved in the face of the fire fanned by the gale of wind.

This incident goes to show that, where the necessary precautions are taken, there is a fighting chance in case of fire. By the judicious outlay of a few dollars the jute mill was saved. Upon such a basis as this, factory mutuals are enabled to provide insurance at very small cost. There may be some expense at the outset to make a mill already built suit the stringent requirements, but this expense is soon more than made up by the reduced cost of insurance. In 1885 insurance in mutual companies cost 15 to 10 cents per hundred dollars, while factories insured in old companies paid \$1.25 on the hundred dollars. In that one year alone the members of the mutual companies saved themselves \$3,000,000 by adopting the mutual plan instead of relying upon the old-line companies.

In North Carolina, South Carolina, Georgia, Alabama and Tennessee are 280 cotton mills. Suppose these mills were to organize for mutual insurance. It is safe to say that they represent at least \$42,000,000,

which is an average of \$150,000 to a mill. Let the aggregate insurance be \$40,000,000. With good management the insurance would not cost much, if any, more than in other parts of the country, but call it 20 cents; then these mill owners would pay \$80,000 yearly for their insurance. But if they were insured in old companies at \$1.25, their premiums would amount to \$500,000.

Many Southern mills are already insured in mutual companies, greatly to their benefit, but we believe there is room for a mutual company made up entirely of Southern mills. Many mills now insured in old companies would save largely in premiums paid, the mills would be more scientifically arranged to avoid fire, and there would be a bond of sympathy among mill owners that does not now exist.

In 1880 Dallas county, Texas, according to the census reports, had \$450,725 invested in manufactures, the total value of the product being \$1,459,362, and the hands employed numbered 527. At the present time this county has \$2,682,800 invested in manufacturing interests, furnishing employment to 2019 hands, and yielding \$3,723,300 in products, not counting half a dozen or so factories that have commenced work since the county assessor undertook the compilation of these statistics. Dallas has been more noted for the growth of its trade interests than for its increase in manufactures, and yet it has quadrupled the number of factory hands, more than quintupled the capital invested, and nearly trebled the value of the products of its factories since 1880. Facts like these give some idea of the magnitude of the general industrial advance of the South in the last eight or nine years. Now that Dallas, and the same is true of all Texas, is turning its attention more directly to its manufacturing interests, a still more rapid growth may be looked for.

A 2,000-spindle cotton mill is to be erected in the city of Bessemer, Ala. Ten years ago that place did not have 500 population.—American Machinist.

The cotton mill is to have 20,000 spindles instead of 2,000; and as to Bessemer's having 500 population ten years ago, why less than five years ago the place where Bessemer now stands was a forest. It doesn't take ten, or even five, years to lay out and build a prosperous town in the South in these days.

THE Morris Mining Co., of Birmingham, has signed a contract with the Louisville & Nashville Railroad for the shipment of 1,000,000 tons of ore during the coming year. The entire cotton crop of the South furnishes about 1,500,000 to 1,700,000 tons of freight a year, or in the number of tons only about 50 per cent. more than this one iron ore mine. This is what the development of the iron interests of the South means for the railroad of that section.



### An Important Railroad.

A dispatch from Staunton, Va., says:

Prof. R. N. Poole, president of the Staunton & West Augusta Railroad, last Saturday closed the contract for the construction of the first link in the Staunton & West Augusta Railroad, twenty five miles in length, from Staunton to the anthracite coal and iron and timber fields of the North mountain. Messrs. Keating Bros. & Co. take the contract. The officers are R. N. Poole, president; J. N. Carroll, secretary, and W. P. Tams, cashier of the Augusta National Bank, Staunton, treasurer.

The building of this railroad means, among other things, the opening up of a great anthracite coal field in Virginia. Notwithstanding the fact that many geologists have seriously questioned the possibility of finding large bodies of anthracite coal in Virginia, the MANUFACTURERS' RECORD is confident that the coal is there, and that it will prove a source of great wealth to that State.

Prof. Pool, the president of the road, is one of the most tireless workers in the organization of new industrial enterprises for the development of the State which Virginia has ever had. He is now pushing many projects in addition to this railroad that promise to draw millions of dollars into the State. The MANUFACTURERS' RECORD can only hope that his health and strength may continue sufficient to enable him to carry his great plans to a full consummation, as they will prove of incalculable value to the Old Dominion.

PENSACOLA, FLA., wants a furniture factory, and is so anxious for it that two leading furniture dealers have offered to take \$5,000 apiece in stock, provided other citizens subscribe \$5,000 more, and experienced men can be induced to raise a like amount, \$15,000, and manage the business. The city is in the neighborhood of abundant supplies of hard and soft wood, and the Louisville & Nashville Railroad agrees to give the factory the benefit of its most reasonable rates. The Daily News has worked hard to encourage local enterprise, and with a factory so near its grasp, it is sincerely to be hoped that success will be attained.

It is a satisfaction to the MANUFACTURERS' RECORD to report that a soap factory is to be built at Charleston, S. C. About \$10,000 will be invested in the enterprise. There is no reason at all why such a factory should not pay handsomely, being situated in the cotton-seed oil and rosin country. In a recent issue we strongly urged the establishing of soap factories in the South, because they are small industries and require only a limited outlay of cash to establish them. We shall hope that the example of Charleston will be followed by at least a dozen other enterprising towns in the South before the new year.

### A Small but Important Industry.

In a recent issue of the MANUFACTURERS' RECORD we called attention to soap making as a small industry that could be established to great advantage and at very little outlay of money in nearly every town of the South, and a large amount of money thus kept at home which now goes to New York, Chicago and other Northern cities.

To day we would call attention to butter and cheese making.

The other day a well-known physician and surgeon, who spent three years in the lower Mississippi region during the war in hospital service, and who wrecked his health there, told to the editor of this paper of a little experience of his with a creamery. "I was obliged to seek perfect quiet," said he, "so I retired to a little country town in the hills of New Hampshire. As I became acquainted with the various farmers, I found that they made some butter, but most of it of indifferent quality, and used quantities of nice milk to feed swine; so just to occupy my mind I agitated the creamery question, and to encourage the movement contributed \$500. The farmers one after another became interested. We hired an old abandoned mill, fixed it up at little cost, and soon had our creamery running. For the first year we had hard sledding, but the whole community soon became interested in this, their only industry, and patronized it. As a result, we run at our utmost capacity all the time now, and sell all our products in Boston at fancy prices. And this little investment which I made simply to help a good work along is now paying a very handsome dividend."

This same experience could be repeated all over the South. The sweet grasses of the hillsides make the finest of butter, and with the longer season in the South, there would not be the great expense of stall feeding the cattle for many months as in this little New Hampshire hamlet. Practical experience demonstrates the fact that the best of dairy products can be made in the South. All that is necessary is a little energy to perfect the organization and interest all the farmers in the locality, so that the creamery shall be a co operative one. Butter can be made much better and much cheaper in this way than when each farmer attempts to make it at home and at the same time keep up with his other work. The outfit for such an industry is inexpensive. A great convenience to such an establishment is a good spring or stream which can furnish power, and also be relied upon for cooling the milk and otherwise assisting in the manipulation of the products. Any live farmers' alliance in the South has the resources at hand to build up a creamery, and thus add to the income of each person interested.

Subscribe to the MANUFACTURERS' RECORD.

## Washington the Choice.

Governors, Congressmen and Mayors Enthusiastic for Washington as the Place for the Exposition of 1892.

Thirty Votes for Washington and One Each for New York, St. Louis and Chicago.

SOME STIRRING LETTERS FROM THE SOUTH.

The MANUFACTURERS' RECORD, desiring to learn the sentiment of the people of the South as to the most desirable place for holding the exposition of 1892, recently wrote to the governors of the Southern States, to a number of Southern Congressmen, and to the mayors of the leading cities of the South, asking for their views upon the subject. The letters which have so far been received, and all of which we publish to-day, are almost unanimously for Washington. Thirty strongly urge the national capital as first and foremost above all cities the place for the exposition, one favors New York, one Chicago, and one St. Louis, with Washington as the second choice. It is remarkable that the sentiment of the South as voiced by these letters should be so overwhelmingly in favor of any one place, as it is a rare thing to find such unanimity of views upon any subject. This grand event, which is to surpass all other expositions and which is to display to the nations of the world the magnitude and grandeur of the greatest republic on earth, will mark a new era in the world's history. "It is," said the resolutions recently adopted by the mass-meeting in Baltimore, "beyond the magnitude and dignity of a private corporation or any individual city, and Washington, which is commercially neutral ground, the city of the nation, and of all the States, and the capital of the oldest and foremost American nation, is the only proper site for the commemoration of this great historical event."

We commend to our readers the following letters:

A STRONG LETTER FROM GOV. TAYLOR IN FAVOR OF WASHINGTON.

EXECUTIVE OFFICE,  
NASHVILLE, TENN., August 17, 1889.

Editor Manufacturers' Record:

To hold the exposition of 1892 at Washington would exhibit to the assembled world the machinery of the greatest republic in actual operation—a colossal exhibition within itself. If it is held elsewhere, but a part of the interesting and valuable collection that make up the departments and government institutions can be shown, and that at enormous expense, in inactive situation and broken relation. We want to show our government in action, as well as the resources and inventions, and riches of the general country, and the latter could as easily be brought there, and more advan-

tageously exhibited in conjunction with the government exhibit. Besides, it is centrally situated, and its selection harmonizes all claims and relieves the matter at once of all sectional prejudice, giving equal advantage to all. Paramount to all, if the interest of the South is to be considered, there is no other place mentioned or possible where she would have equal footing and advantage.

ROBT. L. TAYLOR, Governor.

CONGRESSMAN WHEELER FAVORS WASHINGTON

WHEELER, ALA., August 16, 1889.

Editor Manufacturers' Record:

Your letter received. The natural advantages of the South must necessarily in a very few years make it a great manufacturing center. There is no place on earth where cotton and iron goods can be manufactured as cheaply as in the Southern States. Our fertile soil and delightful climate will also be very attractive to agriculturists, and our unlimited supply of superior timber will go very far to draw other industries to our country. The sooner these facts are made known to the world the quicker will this desired object be consummated. If the exposition of 1892 be held in Washington it will aid very much in informing the world regarding our resources, and I am very much inclined to favor that locality.

JOB. WHEELER

NATIONAL PRIDE AND SECTIONAL UNITY SUGGEST WASHINGTON AS THE PLACE.

MAYOR'S OFFICE,

GREENSBORO, N. C., August 17, 1889.

Editor Manufacturers' Record:

In reply to your letter of August 14 desiring an expression of opinion as to the proper place for holding the exposition of 1892, Washington or New York? I will say my individual choice is Washington, and I believe it is the choice of our people; for that convenience, national pride, sectional unity and good-will, and propriety in every view of the matter suggest Washington, the capital of this, our great and common country, as the proper place. JAB. W. FORBIS, Mayor.

GOV. JACKSON EMPHATIC FOR WASHINGTON.

ANNAPOLIS, MD., August 17, 1889.

Editor Manufacturers' Record:

I have no time to reply in full, as I must take train for New York in a few minutes.

In a word, I will say that I think the exposition should take place; it would be a sad mistake should it not. Washington is the place; indeed, I do not know a single practical reason for any other place, and it should be under the management and control of the nation. Washington is neutral ground. A thousand reasons in favor of Washington for one against. Can't say more. E. E. JACKSON.

THE PREFERENTIAL PLACE IS WASHINGTON.

OFFICE OF MAYOR,

PETERSBURG, VA., August 15, 1889.

Editor Manufacturers' Record:

Washington, D. C., is the preferential place of all others to hold the exposition of 1892, for many and obvious reasons.

It is the capital of the country, and is the most attractive of all our cities. It is equally accessible, if not more so from all parts of the country than New York, and above all, Washington is regarded as the common property of all the people, and the people have a just pride in this their own city. CHARLES F. COLLIER, Mayor.

WASHINGTON BEYOND ALL QUESTION.

MAYOR'S OFFICE,

FLORENCE, ALA., August 17, 1889.

Editor Manufacturers' Record:

Washington city is beyond all question not only the proper place for the exposition of 1892 to be held, but the choice of our people. ROBERT ANDREWS, Mayor.



# WASHINGTON THE MOST SUITABLE PLACE. HAGERSTOWN, MD., Aug. 16, 1889.

*Editor Manufacturers' Record:*

Yours of the 14th at hand. In reply say that I think Washington is by far more central and suitable place for the exposition. LEWIS DELAMARTER, Mayor.

# WASHINGTON THE ONLY PROPER PLACE. MAYOR'S OFFICE, FREDERICKSBURG, VA., Aug. 17, 1889.

*Editor Manufacturers' Record:*

Washington, the capital of the United States, is the only proper place for holding the exposition of 1893, and there should not be a dissenting voice, as thousands would go there to see the city, and the Washington Monument and Mount Vernon nearby, in addition to the exposition, who could never be induced to go elsewhere, it being easy of access from all quarters and near the dividing line of the Northern and Southern sections of our country. No other place in the United States could be named that would afford as many attractions, or would be as suitable for such an exhibition, and no other place should be thought of.

A. P. ROWE, Mayor.

# SUCCESS MORE CERTAINLY ASSURED AT WASHINGTON THAN ELSEWHERE. MAYOR'S OFFICE, ROME, GA., August 15, 1889.

*Editor Manufacturers' Record:*

Your letter to hand and contents considered. It will be eminently proper to have this exposition of 1893 at Washington, D. C. Washington is the national capital; it is common ground to every section of the country; the national pride will be more completely aroused, and the success of the exposition more certainly assured. W. F. AYER, Mayor.

# WASHINGTON, THE GATEWAY BETWEEN THE NORTH AND SOUTH, IS THE PLACE. MUNICIPALITY OF GADSDEN, GADSDEN, ALA., August 16, 1889.

*Editor Manufacturers' Record:*

I wish to herewith acknowledge receipt of your esteemed favor of 14th inst., in which you request an expression from me as to where the exposition of 1893 should be held. When we remember that Washington is the nation's capital, the gateway between the North and South, and would become the meeting place of from 8,000,000 to 10,000,000 people during the exposition from all sections of the country, the Northern and Eastern capitalist, thus coming in personal contact with the people of the South, could be induced to investigate for a few days the attractions and resources of this section, and no doubt many would conclude to visit the "New South" before they returned. So far as the South is concerned and the benefits to be derived therefrom, which, in my opinion, are incalculable, I would unhesitatingly say the exposition should be held in Washington. I believe the exposition would be a grander success if held there than almost any other city that might be selected. Being centrally located and easy of access from all parts of the Union, and the capital of the greatest government on earth, thousands of our people from all points of the compass would be induced to visit the exposition who otherwise would not attend.

JOHN P. RALLS, JR., Mayor.

# WASHINGTON THE CHOICE OF FROSTBURG. FROSTBURG, MD., August 16, 1889.

*Editor Manufacturers' Record:*

Our people favor holding exposition of 1893 in Washington, as being more central, and as the facilities for reaching there is equal to that of New York, especially for a large majority of the people of the United States. We believe the people of the South will take a pride and interest in an exposition held in Washington, the capital of the nation, that they would not take if held in any other place.

WM. THOMAS, Mayor.

# SHOULD BE HELD AT THE CAPITAL OF THE GREATEST AND MOST GLORIOUS REPUBLIC THE WORLD HAS EVER KNOWN.

OFFICE OF THE MAYOR,  
PORTSMOUTH, VA., August 15, 1889.  
*Editor Manufacturers' Record:*

I regard Washington as by far the most eligibly situated center for holding the great exposition in 1893.

It is easily approached, and the natural accommodations are very superior. It will be a great thing to say that here, at the capital of the greatest and most glorious republic that the world has ever known, are met together men of all climes, who have never met before, in earnest endeavor to further the advancement of civilization. Let us have it at Washington by all means, for there are the corner-stone and pillars of our great government; and by tarrying there a while the Greek, the Turk, and many others from far-away climes, may learn a lesson that will go far to christianize the world, and contribute largely to that love of liberty without which true happiness is unknown.

J. THOMPSON BAIRD, Mayor.

# ONE VOTE FOR NEW YORK FROM CON- GRESSMAN VENABLE. PETERSBURG, VA., Aug. 16, 1889.

*Editor Manufacturers' Record:*

Your favor of 14th at hand. I would be very glad to see the exposition of 1893 held in Washington or even farther South, if Washington or any Southern city were equal to so great an undertaking. New York is by far the best place for it. I believe that it can raise more money for the exposition than any other city in the country. It can best accommodate the crowd that will attend. Its railroad facilities are unsurpassed by those of any place in America, and it has many lines of steamers running to Europe. New York is in all respects the great city of America, and the location of the exposition elsewhere would be soon recognized as a mistake and be regretted.

EDW. C. VENABLE.

# WASHINGTON, BECAUSE IT IS THE NA- TION'S CAPITAL. CUMBERLAND, MD., August 15, 1889.

*Editor Manufacturers' Record:*

I think the exposition should be held at Washington, because it is the nation's capital. J. W. SHUCK, Mayor.

# HON. JOHN O. PENDLETON CAN'T DE- CIDE BETWEEN NEW YORK AND WASHINGTON.

WHEELING, W. VA., August 15, 1889.

*Editor Manufacturers' Record:*

I have so far given the matter but little thought. As between New York and Washington it is difficult to decide. Both possess peculiar advantages. New York has hotel capacity, is on the sea coast, and has the wealth to make the exposition a success without government aid. Washington is more central, more beautiful, and is the national capital. When we come to the bridge we shall have plenty of time to walk over.

JOHN O. PENDLETON.

# DECIDEDLY FAVORS WASHINGTON. MAYOR'S OFFICE, CHARLESTON, W. VA., August 15, 1889.

*Editor Manufacturers' Record:*

Your letter touching the subject of the place at which the exposition of 1893 should be held was this day duly received. In response thereto permit me to say that I am decidedly of opinion that the city of Washington is the point at which the exposition should be held. JOSEPH L. FRY.

# CHICAGO HAS ONE VOTE.

OFFICE OF C. W. SEABRIGHT,  
Mayor of the city of Wheeling.  
WHEELING, W. VA., August 15, 1889.

*Editor Manufacturers' Record:*

All I have to say is, my choice is Chicago as the best place in the United States.

C. W. SEABRIGHT, Mayor.

# ALABAMA'S GOVERNOR VOTES FOR WASH- INGTON.

STATE OF ALABAMA,  
EXECUTIVE DEPARTMENT.  
OFFICE OF THE GOVERNOR,  
MONTGOMERY, August 16, 1889.

*Editor Manufacturers' Record:*

Your favor of August 14th reaches here in the Governor's absence, but I venture to call your attention to his letter recently published in the New York Independent, in which he declares himself in favor of Washington as the fit place for holding the world's exposition in 1893.

J. K. JACKSON, Private Secretary.

# AS A NATIONAL EXPOSITION IT SHOULD BE AT THE NATION'S CAPITAL.

FAYETTEVILLE, N. C., Aug. 16, 1889.  
*Editor Manufacturers' Record:*

Replying to your letter of the 14th as to whether the exposition of 1893 should be at New York or Washington, I would say, considering the United States as a nation, it is to be a national exposition, and should, if practicable, be at the nation's capital. The government will contribute largely, and the appropriations, if expended at the capital, can be so used as to secure permanent buildings that may be dedicated or used for the encouragement of some of our industries or arts. Washington is more central than New York. For these reasons and many others that might be mentioned I would say Washington city. N. W. RAY,  
Chairman Commissioners of Fayetteville.

# WASHINGTON PREFERABLE. MAYOR'S OFFICE, OWENSBORO, KY., August 16, 1889.

*Editor Manufacturers' Record:*

In reply to yours I would say that Washington would be preferable from a purely national standpoint for the holding of the great exposition in 1893.

JO LEE, Mayor.

# RICHMOND HEARTILY FAVORS WASHING- TON.

MAYOR'S OFFICE,  
RICHMOND, VA., August 16, 1889.

*Editor Manufacturers' Record:*

I am heartily in favor of Washington as the place for the exposition of 1893.

J. TAYLOR ELLYSON.

# STRONGLY FAVORS WASHINGTON—THE CAPITAL OF THE GREATEST NATION ON EARTH.

MAYOR'S OFFICE,  
CHARLOTTE, N. C., August 16, 1889.

*Editor Manufacturers' Record:*

Yours of 14th inst. received. The sentiment of the people of Charlotte and this section of the country is strongly in favor of Washington as the place for holding the exposition. Washington is preferred because of its accessibility, railroad accommodations, wide streets, wealth of attractions, hotel and boarding-house advantages and resources for the entertainment of great throngs of sightseers. It is the capital of the nation, the greatest nation on earth; and that is another potent reason why the national exposition should be held there.

F. B. McDOWELL, Mayor.

# WASHINGTON THE PLACE OF ALL OTHERS. MAYOR'S OFFICE, ALEXANDRIA, VA., August 15, 1889.

*Editor Manufacturers' Record:*

Yours desiring my views on the place where the exposition of 1893 should be held, has been received. I have no hesitation in saying that I consider Washington the place of all others to be selected. As the capital of the greatest nation on earth, it alone possesses many attractions for the millions who will visit the exposition. Its proximity to Mt. Vernon, the resting place of the remains of the father of his country, and to Alexandria, containing the church where he worshipped, offer additional inducements for its selection.

E. E. DOWNHAM.

# THE NATIONAL CAPITAL PRE-EMINENTLY THE MOST APPROPRIATE PLACE.

MAYOR'S OFFICE,  
WINCHESTER, VA., Aug. 15, 1889.

*Editor Manufacturers' Record:*

Upon the subject of the place where the great exposition of 1893 is to be held, I have no hesitation in asserting that of all the cities in the Union, the national capital is pre-eminently the most appropriate, and I may say the most attractive place. That city will doubtless soon have attained the distinction of being the most beautiful city in the world. There should, at least, be no sectionalism exhibited or felt upon this great occasion, but every American citizen should feel proud to see this exposition held in the capital city, and also that we have a city which reflects so much credit upon our people. There is no city in America where visitors feel so much at home as in Washington, and our people feel an especial interest in having this city selected on account of its proximity to ourselves; but this is not the controlling motive. We wish the world to see and visit our beautiful capital and enjoy her ways, and from thence they may go whither pleasure or business may call them. We vote for Washington, and feel satisfied that its selection will occasion no regrets.

WM. M. ATKINSON,  
Mayor of Winchester.

# GREATLY PREFERS WASHINGTON, AND ASKS THE MANUFACTURERS' RECORD'S INFLUENCE IN FAVOR OF IT.

WINSTON, N. C., August 15, 1889.

*Editor Manufacturers' Record:*

I very greatly prefer Washington to New York for the contemplated exposition, and urge you to use all your influence to bring about this result.

Acting Mayor.

# WASHINGTON THE CHOICE OF MARTINS- BURG.

THE MAYOR'S OFFICE,  
MARTINSBURG, W. VA., August 15, 1889.

*Editor Manufacturers' Record:*

Your favor of the 14th at hand. Would say in reply that Washington is my choice, as well as that of our citizens.

CHAS. O. LAMBERT, Mayor.

# THE NATION'S CAPITAL. OFFICE OF MAYOR OF THE CITY OF PINE BLUFF, PINE BLUFF, ARK., August 17, 1889.

*Editor Manufacturers' Record:*

Replying to your favor of the 14th inst., will say our people would prefer a Western city, St. Louis first. Believing that city will be overshadowed by both New York and Washington, I would give preference to the nation's capital. As between the two cities, Washington, as the capital of the nation, should have the preference. The proximity of many cities within easy reach by rail will give accommodations to 10,000,000 visitors. By 1892 the development of the resources of the South will have reached a point beyond parallel in the history of nations. The exposition will be the opportunity; the grand view will be taken; thousands will pass through the gateway at Washington to view and appreciate the world's wonder—the resources of the South.

J. W. BOGAGE, Mayor.

# WASHINGTON, THE NATION'S "MEETING PLACE," THE MOST DESIRABLE.

MAYOR'S OFFICE,  
HUNTSVILLE, ALA., August 17, 1889.

*Editor Manufacturers' Record:*

Your letter concerning the location of the exposition of 1893 is at hand and noted. What financial considerations may enter into the location selected I do not know, but aside from this, Washington is surely more desirable. The exposition is a national affair, and Washington is the capital and the nation's "meeting place" for all purposes involving a national sentiment.

JOHN MURPHY, Mayor.



"CAPITAL OF THE GREATEST COUNTRY THE  
SUN EVER SHONE ON" IS THE PLACE.

OFFICE OF MAYOR,  
PARIS, KY., August 16, 1889.

Editor *Manufacturers' Record*:

Noting yours of the 14th inst., it is certainly true there is nothing great nowadays in the way of shows and congresses that is not either national or international. In locating the exposition of 1892, the main point is the accomplishment of the greatest good to the greatest number of people (our own people, of course). Some things, some names, some places, there are which by a common instinct are held sacred. Washington, the synonym of patriotism; Washington, the scene of heroic deeds, the precinct of patriotic graves and the home of sublime thoughts, the school of statesmanship, the palladium of free government; Washington, the capital of the greatest country God's sun ever shone on; the nation's pride. The interests, alike East, West, North and South, center at the national capital; here all barriers of sectional rivalries and local ambitions merge into the common weal. By all means locate the exposition of 1892 at Washington city, and then—not New York, Baltimore or Chicago; but the people of the United States will win and wear the credit and glory that crown its success.

W. P. CHAMBERS, Mayor.

ST. LOUIS FIRST CHOICE. WASHINGTON  
SECOND.

STATE OF ARKANSAS.

EXECUTIVE OFFICE,  
LITTLE ROCK, August 17, 1889.

Editor *Manufacturers' Record*:

Replying to yours of 14th inst., I am directed by Governor Eagle to say that he prefers St. Louis as the place for holding the exposition of 1892, it being a Western city, near the geographical center as well as the center of population, and visitors in going and returning would see more of this country, and particularly of the great West and its wonderful resources and possibilities. If, however the exposition is to go to the East, he prefers Washington city, it being the nation's capital.

JNO. C. ENGLAND, Private Secretary.

EARNESTLY FOR WASHINGTON.

ATLANTIC CITY, N. J., Aug. 19, 1889.

Editor *Manufacturers' Record*:

Owing to my absence from Baltimore, your letter has just reached me. I am earnestly in favor of Washington, D. C., as the place of holding the exposition of 1892, and believe it should be under joint Federal and State control.

H. WELLES RUSK, M. C. 8d Dist, Md.

HON. HERMAN STUMP FAVORS WASHINGTON

BEL AIR, MD., August 19, 1889.

Editor *Manufacturers' Record*:

Yours of the 14th inst. just handed me. I have only time to say that I prefer Washington. Should the government be called upon to pay all expenses in case Washington is selected my views might undergo a change.

HERMAN STUMP.

FREDERICK VOTES FOR WASHINGTON.

FREDERICK, MD., August 16, 1889.

Editor *Manufacturers' Record*:

I am in receipt of your letter of 14th. I think Washington would be the proper place for the exposition, it being the nearest point between the North and South.

LOUIS H. DOLL, Mayor.

THE DOLL'S RUN, W. Va., oil field is experiencing a greater boom than ever, and the prospects for an exceedingly productive territory were never so bright. Seventy wells are now going down, and several will get the sand within the next forty-eight hours. One 50-barrel well and one of 70 barrels came in Saturday. A party of Pennsylvania capitalists have just returned from a tour of the field and they are enthusiastic.

## CUMBERLAND GAP.

### A New Era in the South's Industrial History.

#### The Great Tunnel which Opens up an El Dorado Finished.

HOW AMERICAN HISTORY MIGHT  
HAVE BEEN CHANGED.

##### HEADQUARTERS

MANUFACTURERS' RECORD'S EXPLORING  
EXPEDITION.

CUMBERLAND GAP, Aug. 10, 1889.

When we were at the Breaks of the Big Sandy we saw the extreme Eastern presentment of the Elkhorn coking coal, as hath been written. Now we are nearly at the Western end of the horizon, and in sight of the famous gap called Cumberland. Hon. John R. Procter, State Geologist, and Col. R. Stoddard Johnston, had promised to join the party at Pineville, and in their company I expected to make a preliminary run over the region about Cumberland Gap, before getting down to the solid and extensive business necessary to a study and report of this most remarkable and important region. The whole industrial future of the States of Kentucky and Tennessee is vitally mixed up with the resources and developments of the country lying between Big Stone Gap and Big Creek Gap, and these gateways, with Cumberland Gap added, are the principal strategic points in the theatre of the industrial movement already begun and gathering force and volume every day.

Historically by far the most noted and interesting point is Cumberland Gap. Probably Daniel Boone was the first white man to find his way into Kentucky by this route. He blazed a trail to it through Virginia, and it was called the Wilderness trail. Then a road was made over the same route and called the Wilderness road. This road was afterward extended far up into Kentucky and South through Tennessee, and, until the Civil War, it was the principal avenue of interior trade and travel from Savannah to the Ohio river. The history of the nation is involved in the history of Cumberland Gap and the Wilderness road. First, a large part of the early settlement of Kentucky was effected on this line. Next the inland commerce of a number of Southern States followed it. Then along came the War and Cumberland Gap became a military point of vast importance. The tremendous cliffs about the pass were fortified, and the forest growth literally cleaned off the mountain sides, that there should not be any cover for an enemy contemplating an assault.

It really requires a view from the "Pinnacle" of the mountain which dominates the Gap on the Eastern side, to appreciate what a place this is! I know that comparisons are odious and it is not worth while to depreciate one thing in order to magnify another. But comparatively few people have been on the mountains at Cumberland Gap, and pretty much everybody has climbed Pike's Peak, one time or another. Well, the people who have been on Pike's Peak, Mont Blanc, Ben Nevis and so on will have some idea of what a

scene is opened to the startled vision from the summit of the "Pinnacle" rocks. None of the better known eminences from which globe trotters are wont to look down upon the earth's surface exceed this point in respect of the beauty or grandeur of the view.

Readers who will take the trouble to look over a map of the United State, and note the manifest importance of Cumberland Gap, as a means of communication between the Southern and Northern, especially the Northwestern States, will also wonder why a line of railway has not been long ago constructed through the pass. It is not to be supposed that the same idea never occurred to our forebears. As a matter of fact the matter did occur vividly to the progressive men of the South half a century ago, at a time when American railway enterprise was in its infancy. As early as 1835, or thereabouts—never mind the exact date—when the railway idea was prominent in Southern minds and the State of Georgia was formulating the scheme which led to the foundation of the Georgia Railroad and Banking Company—a scheme, by the way, that paid from the start, lifted Georgia's debt and made the commonwealth solid—it was intended to have similar State action in Tennessee and Kentucky and to extend the Georgia idea so as to cover a line of railway all the way, via Cumberland Gap, from Savannah to the Ohio river. A bill was prepared and presented before the Kentucky legislature, and it was promoted and supported by a large contingent of Kentucky's ablest sons. I am told that Henry Clay was heartily in favor of the project and that he urged his friends to further the object. Adherents of the measure were confident when the bill approached its final stage. But great Tom Marshall, then a member of the legislature, was bitterly opposed and worked night and day to defeat it. Memminger, of South Carolina, came up and worked before the committees and in the lobby to secure favorable action, and all seemed promising and even safe until the counting of the noses on the final vote, when the measure was killed by the single vote of Tom Marshall. The railway through Cumberland Gap was not to be until long after. I was present on the other side of the gap when the headings of the tunnel through the Cumberland Mountain met, and the road from the sea to the Ohio by this route was rendered practicable. This was only last Thursday evening at 6 o'clock.

Fancy now how American history might have been changed if the old scheme had worked! With railway communication between the interior South and North, there would have been intimate trade and communication; the people of the separated sections would have grown acquainted and become, perhaps, homogeneous. Differences that were finally settled by blood, might have been arranged through peaceable convention and the horrors of fratricidal war averted. It was not to be, of course, and the milk has been spilled too long to make a fuss about it now. The railway is through at last and there are great movements impending there anent. Before the twentieth of August the Louisville & Nashville will be running into and through Middleboro to the northern end of the tunnel, there to connect with the Knoxville & Cumberland Gap Railway and the connection will be complete. The link thus formed will be of the greatest importance to the two rich mineral regions north and south of the Cumberland mountains; regions of such surpassing interest that the details of their conditions and phenomena must of necessity be taken up with care and deliberation.

Since we have already started that consideration it is probably best to continue with the subject of the coking coals of the

region! All the way from the mouth of Elkhorn Creek, following the line of counties along the northern side of the Cumberland uplift, the Elkhorn Coking horizon is found reliably and persistently present. Its area is over 1,600 square miles as far as it has been defined by the Geological Survey. In a previous paper a letter was written about it. It occurs in seams of from four feet to seven, eight and nine feet, and, in places, even more. Wherever identified it bears the same character, and the numerous analyses of it made from scattered openings throughout the field regularly show it to be the peer if not the superior of the standard Connellsville product. Let us regard the record, the examples used being all from Bell County, where we are making headquarters for the present:

COMPOSITION OF ELKHORN COKE—BELL COUNTY.				
	No. 2,590.	No. 2,599.	No. 2,601.	No. 2,608.
Moisture expelled at red heat	0.30	0.30	0.70	0.40
Carbon in coke	95.80	94.30	92.70	94.00
Ash	4.	5.60	6.60	5.60
Sulphur	1.710	0.601	0.450	0.69
Color of ash	dark brown	brown	brown	brown
Hours of coking	48.	42.	72.	72.

There are many more analyses extant which any one interested may have by writing to the MANUFACTURERS' RECORD or to the Kentucky Geological Survey, Frankfort, Ky. They all give the evidence that the Elkhorn coking coal shows from 89 to nearly 96 per cent of carbon in the coke, is low in ash and sulphur, and generally is as excellent as the most particular foundryman or furnace manager could wish. It seems safe to estimate that a ton of this coke will make a ton of pig iron, calculating on the basis of such ores as are used in the Birmingham district. The only thing needed to make the vast resource at once available is ore. Where is this ore to come from; how far must it, or the coke, travel, and what will be its character? These are questions which it would be easy enough to answer from the printed statements on the subject, that have been kindly forwarded to us by the corporations and individuals interested in the district; and it should be remarked that the same appear to be conservative and fair; but it will take some time to acquire the personal knowledge on the subject necessary to such an independent judgment and report as MANUFACTURERS' RECORD readers expect and will have.

That there are ore deposits in Kentucky which may prove of great value in connection with the Elkhorn coke is probable, but opinion on this point must wait upon the examinations of the coming weeks. There is much to learn as well concerning the ores on the Tennessee side. A number of openings are being made near Dillwyn Springs, south of the Cumberland Gap, where there is a well-defined lead of the Clinton red fossiliferous ore, of Oriskany ores and perhaps still another horizon. There are large prospects in Elk Valley, south of Jellico, and several good showings near Pineville. All these need investigation, which cannot be accomplished hurriedly; and in the meantime we must have patience, see all we can and keep our powder as dry as the perspiration from 30 miles a day on hard trotting horses will allow.

GOLDSMITH BERNARD WEST.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.



## "Cumberland Mineral District."

The Manufacturers' Record's  
Exploring Party Still Study-  
ing the Resources of  
Eastern Kentucky.

A RICH MINERAL AND TIMBER  
COUNTRY.

### HEADQUARTERS

MANUFACTURERS' RECORD'S EXPLORING  
EXPEDITION.

CUMBERLAND GAP, Aug. 15, 1889

When the capitalist, or the tourist, wants to take a look at the wonders of the region around Cumberland Gap his most brilliant scheme is to pack himself into a Pullman and journey to the Kentucky metropolis of Louisville. This is the outfitting point for that neck of woods. The outfit needed is simple; it will suggest itself when it is understood that the district to be exploited is all "prohibition," and that the horses which one may expect to be called upon to ride, are not always the "downy bed of ease," ambling palfrey bred of animals that medieval bishops are reported to have bestridden. Thus it will be seen that if one wishes to be insured against snake bites he should fill his half-pint flask at Louisville, and, farther, provide himself with a stout pair of breeches. The enterprise of the Louisville & Nashville Railway Co., and the excellent hotels at Pineville and Dillwyn Springs on the Tennessee side of the Gap, will furnish all other necessities.

Having taken in the sights around Louisville, and they are many and interesting, the proper caper is to get up early and board the day train for Pineville, via the Knoxville division of the Louisville & Nashville. A good deal of Kentucky will be seen before night, and much of it about the poorest that this remarkably rich Commonwealth has to show. However, it is worth seeing, and some of it notable. You go through what would be locally described as a "right smart" of counties: Jefferson, of which Louisville is the seat; Bullitt, Nelson, famous for its distilleries, several of the leading establishments being on the railway; Marion, in traversing which you see fine lands and farms for a number of miles on either side of Lebanon; and then you have the coal measure lands, which are not especially fertile except under skillful manipulation, all the rest of the way. Boyle county is comparatively rough; Lincoln and Rockcastle, much the same, and the line strikes through Laurel, of interest as being the seat of a very successful Swiss colony established in 1880 through the efforts of the Hon. John R. Procter, director of the Kentucky Geological Survey and Mr. E. A. Fellmer, Secretary of the Bureau of Immigration. This colony, called Bernstadt, was settled on as poor soil as the coal measure formations could well produce. But the colonists were practical, intensive Swiss farmers, thoroughly trained in making as well as cultivating soil. So they went to work and fertilized. Without taking time to go through the history of their evolution, their present situation shows that the experiment has been eminently successful. The colonists have good houses and barns, a neat village with comfortable hotel. They have profitable dairy farms, producing milk, butter and cheese for Northern markets; fine Holstein cattle; truck farms, fruit farms, vine-

yards and wine presses. They have an agricultural society which invests in costly imported stock for breeding purposes for the benefit of members—churches, singing societies and a brass band. All appear to be thrifty and prosperous, and many are growing rich. The moral of this simple tale lies in the fact that there are wide stretches of more than fruitful land throughout the South, upon which our native farmers are slowly starving. The fact in question is a matter of serious import to the section and the nation. It represents a condition that is getting no better with lamentable rapidity, and something will have to be done about it. Perhaps Southern agricultural colleges may be doing good work in the direction of reform. If they are, the results ought to be about beginning to get ready to show.

After leaving Laurel, the train bustles through a corner of Whitley county to Corbin, where two branches of the L & N. converge. One goes on to Jellico and the Elk and Powell Valley districts, and the other makes through the counties of Knox and Pine to Pineville. It is not yet dark, and five minutes' drive across a fine bridge over the Cumberland river and through the town, brings the traveller to as neat and modern a hotel as can be found anywhere East or North. The company which has taken the development of Pineville in hand, had the good sense to make an early investment in a first class inn. When the weary investigator finds a comfortable bath, from which he steps into a springy barber's chair, and thence is advanced, through the various degrees, to an excellent supper, topped off by a well furnished room and undoubted mattresses and sheets, he is quite apt to fall into a frame of mind which will concede without much opposition all he may have heard in favor of the locality. If that investigator happens to be like the Record people, by the next morning he will feel hungry for mineral resources, as well as breakfast, and quite ready for a preliminary skirmish up the creek which is called Straight, to take a look at the coal and ore openings thereabouts. For anything in this line Col. Ray, the president of the townsite company is a cicerone from way back.

Straight Creek is in the line of hill country that catches the horizon of the Elkhorn coking coal, other coals, bituminous and cannel, and the brown ore of the Upper Silurian, Oriskany formation. One hardly turns up the creek from the town before coming to a good opening of the Elkhorn coal. Here a mine is being worked on a vein about 36 inches thick. A number of coke ovens are in operation already, but a Louisville company has recently leased the mine with a view to putting in a large coking plant. Farther up the creek—say three miles or such a matter—there is another opening of recent date, which shows six feet of coal. The position of this coal in the series has not been fully determined, but it looks as if it would make good coke. On the side of the creek opposite to the coal openings, the Pine Mountain fault has lifted the Oriskany formation of the Upper Silurian a hundred or more feet above drainage, and along that horizon are the outcroppings of a very good appearing brown iron ore. It occurs at the surface in the shape of a compact deposit of large boulders. I visited one opening where the face of the deposit was over 30 feet thick. The townsite company, also owners of this and much other mineral land, have done considerable prospecting and testing on this lead. They state that where they have opened the vein they find that it grows thicker as it is followed into the mountain. The greatest distance they have followed it yet is, I believe, fifty feet.

At Lowmoor, in West Virginia, and Clifton Forge, in Virginia, the iron industries are based upon this ore, and at both places the vein has been found to thicken

steadily. Mr. T. T. Wicks, engineer and managing director of the Lowmoor furnace, remarks: "In one instance, where the vein of ore was 16 feet wide at the surface, 208 feet down from this surface the vein was 70 feet wide." Working on this ore alone a few years ago, Lowmoor furnished one eleventh of all the freight handled by the Chesapeake & Ohio Railway. With such possibilities the Oriskany ores of the Cumberland region are entitled to respect and particularly to consideration, but, above all, to careful and thorough examination. At present the openings made on the Pine Mountain side of the Gap are insufficient to warrant any conclusion as to whether they do or do not present the same conditions as at Lowmoor and Clifton Forge. The next two weeks will probably settle that matter for the Cumberland Mountain on the Tennessee side of the Gap. The English company there is having a number of deep openings made both on the Oriskany and Clinton ore horizons. It is likely that this work will settle the question. It is to be hoped that the Pineville people may be equally enterprising. Until farther data has been secured, all that can be said of the Pineville Oriskany ores is that there seems to be a reasonable probability that thorough exploitation may prove them to be sufficiently important to feed a considerable iron industry on the spot. Such a demonstration would establish the future of Pineville as an iron town beyond any peradventure.

Westward of Pineville there are other openings on the Oriskany ore, and on the Elkhorn coking coal. The seams of the latter are not generally as thick in this part of the field as they are farther East, in which direction the horizon seems to thicken steadily from Cumberland Gap. On the other hand the Elkhorn seam may run some distance farther West than it has been traced, and may thicken in that direction too. The recent discovery of 60 inches of coal, showing analysis identical with the best known examples of Elkhorn coal and coke, near Jellico, would appear to justify such a suspicion.

Within a short time the Louisville & Nashville Railway has been pushed to the Cumberland Gap tunnel, there connecting with the Knoxville & Cumberland Gap Railway; so that, almost immediately, Pineville is to be brought into direct contact with the iron regions on the other side of the ridge. That being the case, the coke industry, based on the Elkhorn coking coal, would make Pineville a busy mountain center, iron or no iron. I am hopeful though that the local iron ores may be found in massive deposits and that the coking coal may show up in wider seams.

The change that has come over Pineville since enterprise and the Louisville & Nashville struck the place is hardly less than startling. In the stead of a wildly primitive backwoods village, one steps off the train to fall up against telegraph and express offices, hacks and hackmen, a fine courthouse, several hotels, a number of handsome residences, post office, newspaper office, bank, schools, churches, and all the rest of it. Without risking much we might assert that nothing of any of these kinds was discernible in or about Pineville when "A. Powell," whose name with the date 1780, used to appear on a neighboring beech tree, visited the place, and doubtless there had been but little "boom" between that year and the time Daniel Boone tramped through the Gap in 1760. To-day Pineville with its industrial environs, represents the life and enterprise of a Kentucky which would hardly be more near to Powell and Boone than it is to people yet very much alive.

These poor mountain counties; long despised and almost ashamed to answer to the call of eyes and noses in the State

legislature! Behold they are fast becoming the corner stone of the edifice. A glance at the enhancement of taxable values from 1887 to 1888 will be suggestive:

	1887.	1888.
Bell county.....	\$748,964.	\$1,499,095
Clay ".....	1,073,714	1,164,132
Harlan ".....	813,509	1,001,083
Knox ".....	414,394	483,618
Leslie ".....	479,180	496,956
Letcher ".....	746,030	794,940
Perry ".....	526,505	1,155,007
Total.....	\$4,796,748	\$6,507,485

Considering the necessarily slow removal of the many obstacles to progress in these mountains, the figures shown above are surprising. It is reasonably certain that the statement for the current year will prove even more so.

Brief mention has been made of the timber resources of the Cumberland Gap region and much more probably will be written before we get through with it. The same remark applies to other things. We shall not leave Pineville and its vicinity finally with this paper. Pineville, Middleboro, Cumberland Gap, Dillwyn Springs, Jellico, Johnson City, Big Stone Gap, Big Creek Gap, Jellico, Mahan's Station and perhaps other places all combine to cover a region whose lines of development are too completely interwoven to admit of segregate treatment. The whole thing together means the great Cumberland mineral district (patent applied for.)—and, so, to return to lumber:

I read in a statement printed in one of the Pineville publications that a single lumber company had last year in the Cumberland river and its creeks over 40,000,000 feet of logs awaiting tides! Pineville and all the settlements up and down the Valley are full of lumbermen. The denudation of the more northern forests has thrown the lumber trade in hardwoods and poplar into the arms of Eastern Kentucky. It is stated that the lumber trade of Louisville, which in 1880 amounted to only 10,000,000 feet, now crowds 150,000,000 per annum Louisville and Cincinnati are becoming the lumber and timber marts, instead of Detroit and Chicago. There is a statement extant which is given as an expert report upon 50,000 acres of Cumberland Valley timber lands. As Mr. Procter appears in the quotation below, to accept the statement as all right I feel confidence in using it:

TIMBER ON 50,000 ACRES CUMBERLAND VALLEY LANDS.	
	Feet.
Black Walnut.....	33,330,000
Yellow Poplar.....	60,000,000
Chestnut.....	36,000,000
Ash.....	24,000,000
Hickory.....	18,000,000
Total.....	191,330,000
White Oak Staves.....	105,000,000
Tan Bark, cords.....	25,000

Referring to the foregoing the Hon. John R. Procter is quoted as saying: "It is safe to estimate that there are 500,000 acres of such timber tributary to the streams centering at Pineville." Before we are at it much longer we shall be able to show the coal man and the coke man, the pig iron man and the steel pig man, the hard lumber man and the soft lumber man, all and singular that the Cumberland Valley mineral region of Kentucky and Tennessee is too rich in both resources and prospects, not to demand serious and continued attention. The iron and lumber worlds, especially the former, have learned some unpleasant lessons, through unwillingness to believe that anything could happen in the nature of things to threaten old monopolies or to smash time-honored connections, associations, even prices Birmingham was a case in point. With that memory still fresh, there are several hundreds of excellent and wealthy gentlemen in New York and Pennsylvania, who ought to start by the next express for the Cumberland Mountains. The character and extent of iron, and coking coal deposits, their proximity, or convenience to each other, and many other things render this district just coming into notice, a good one to study. We shall resume ours, probably, at Jellico.

GOLDSMITH BERNARD WEST.



## A LIVE TOWN.

And What it Has Accomplished in One Year.

A Good Illustration of Southern Progress.

[Special correspondence MANUFACTURERS' RECORD.]

ANDERSON, S. C., August 18, 1889.

One year ago Anderson was where many of her sister towns still are—in the old ruts, from which the moss and accumulations had not been removed for decades. A change, however, came over the spirit of her dream. A few live, wide-awake men organized a company for the purpose of erecting a hotel with Mr. F. T. Wilhite as president. It was a crying need, and, after much talk and much opposition, a small subscription was raised. This was the entering wedge. Then the subscription was increased and finally a \$50,000 building was decided upon. This building stands to-day almost completed, and will be ready for occupancy this fall. It is an honor to the town, a credit to the State and a memorial monument to its promoters. While other towns are discussing \$50,000 hotels, Anderson has obtained hers.

I should not say so much for the hotel,

is home capital, and starts out under most favorable auspices.

A company has just been organized with a capital of \$35,000 to erect a spinning mill. There are two other industries now under consideration which will probably be commenced, and for which the people will call in outside capital. These are a shoe factory and a tannery, both of which could be managed very successfully here.

All these enterprises have grown from the first move of the friends of the hotel project of a year ago.

There are in addition to the new industries a cotton-seed oil mill, an ice factory, machine works, a fence company, five planing mills, two brick-yards, a wagon factory and many other lesser industries. There is also the Patrick Military Institute, one of the best schools in the State.

Taxes are very light, but notwithstanding this the present council, consisting of Mayor J. L. Tribble and Aldermen W. W. Humphreys, F. E. Watkins, J. J. Baker, F. T. Wilhite, J. M. Hubbard and G. E. Brown, have paid nearly \$4,000 old indebtedness during the year. The streets are in good condition, and the finances of the town are in a most healthy state.

There are two well-conducted newspapers here, the Intelligence and the Journal, and both reflect the prosperity of the town.

I cannot close without stating the fact



ANDERSON'S NEW HOTEL.

great as is its benefit to the place, were it not for the fact that this was the text which has worked a wonderful change in the hearts of the people, and \$250,000 is now being spent in new buildings and new manufactories. Though previous to the erection of the hotel some subscriptions had been made toward the cotton factory, the place of honor must be accorded the hotel as being that upon which work was first actually begun.

Among the new buildings is the Masonic temple, with stores, offices, hall and opera-house, to cost about \$25,000. The walls of an \$100,000 cotton mill are being erected as fast as men and mortar will do it, and it is intended to purchase machinery in time to utilize some of this year's crop of cotton. Nearly a dozen new store buildings are going up on the square. A female college has just been organized, and an elegant building is to be erected at once. The Baptist church is to be remodeled at a cost of \$10,000.

The Farmers' and Merchants' Bank has just begun operations with a capital of \$50,000. Mr. R. S. Hill is president and Mr. J. R. Vandiver, cashier. They have erected a handsome new building at a cost of about \$10,000, and fitted it with the best and latest appliances for security. It

that is so apparent to me, as well as to others who come here, that Anderson is a surprise in the amount of get-up and go-ahead-iveness she has developed in so short a space of time.

JOHN P. COFFIN.

**BUILDING SUGAR MILL.—ST. CLOUD, FLA.,** August 16, 1889.—I am building a sugar mill here with capacity of 5,000 pounds sugar per day; about 60 horse-power engine and boiler. Will be able to grind 100 to 150 acres per season. Will purchase cane outside my own crop. R. E. ROSE.

**A STORAGE WAREHOUSE.—RANDLEMAN, N. C.,** August 14, 1889.—The Southern Plaid Manufacturers' Association will erect a cotton storage warehouse at Charlotte, N. C., to cost \$10,000, and to store at least 20,000 bales cotton, so as to be able to get best of cotton as soon as it comes into market. J. H. FERRE, Secretary.

**MACHINERY WANTED.—MILLEDGEVILLE, GA.,** August 16, 1889.—I want to purchase mill machinery for corn mill—engine, boiler and rocks, 2 sets—40 horse-power engine and 50 horse-power boiler. I want to buy an electric plant for oil mill.

W. S. BROOKS.

## The Iron Ores at Buena Vista, Rockridge County, Va.

[E. C. Pechin in New York Engineering and Mining Journal.]

For many years past the iron ores of Virginia have at intervals been brought to the attention of the public as full of promise, but in the main there has been little realization. Lowmoor and Longdale have been fairly successful, and further south Roanoke, Pulaski and Inverhoo have been doing good work, but all along the western base of the Blue Ridge north of the James river there has been thus far much disappointment. The writer has lately examined some of the ore deposits on the Buena Vista and adjoining properties, and his conclusions may not be wholly devoid of interest. The position is a somewhat embarrassing one, because he has to stand midway between the native and the adopted Virginian, who sees in every outcrop or float the unquestioned evidence of veins of ore of marvelous richness and inexhaustible quantity, and a good many very shrewd and intelligent business men in the North who have had experience with brown ores North and South, and especially in certain parts of Virginia, who refuse to believe that any substantial mines can be discovered or operated in that section.

The writer will simply give what he has seen, and let the reader determine for himself the correctness of his conclusions. One thing is certain, that a real mineral region is more largely benefited by the statement of what seems reasonable and can be proved, than by indulging in wild imaginings and fanciful predictions. The one is calculated to develop a substantial prosperity, if somewhat slow—the other "wildcats," frisky and exciting while they are about, but leaving loneliness and disappointment and many unsaleable corner lots at their early departure.

Before we get to the ores, a few words must be said about Buena Vista itself. Previously to his visit, the writer had thought that Anniston, Ala., was one of the most admirable and picturesque sites he had ever seen for an industrial town, but Buena Vista beats it. Nature has nearly exhausted its capacities in taking care of it. For miles along the clear, bold flowing waters of the north and south forks of the James river stretch broad, fertile fields, which are now being laid out into town lots for the million; behind these low, beautiful rounded, verdure clad foot hills, and back of all the magnificent range of the Blue Ridge Mountains, stretching its splendid horizon line north and south for an indefinite distance. The flats lie about 850 feet above tide; a second plateau and the foot hills rise from 75 to 300 feet higher, while the mountain peaks and crests tower above the plain some 1,200 to 1,700 feet.

Standing on one of the minor elevations, with the flashing river on one side, the bold mountain range on the other, and the far-reaching verdant fields between, the sight is rare and surpassingly attractive. The present owners are building a commodious and pretty Queen Anne inn on a wooded plateau, some 90 feet above the plain, from the front of which all of these beauties can be noted; and when it is open, which will be soon, the place will be well worth a visit, whether one is after iron ores or not. Man has largely assisted nature in making the place desirable. The Lexington branch of the old and now disused James River & Kanawha Canal has, at short intervals, massive stone dams from 12 to 15 feet high, giving a large and continuous water power. The Shenandoah Valley Railroad runs through the property some six miles and more; the Lexington Branch of the Richmond & Allegheny R. R. cuts the town site, and by it also the Valley Branch of the Baltimore & Ohio R. R.

reaches the location. Practically, the property is served by three great trunk lines, running north, south, east and west, and in three directions tapping inexhaustible supplies of fuel—the Flat Top, the New River, and the Connellsville coal fields.

Less than 300 miles from the Ohio river, at Huntingdon, 400 miles from Pittsburgh, and from 450 to 600 miles further north than Chattanooga and Birmingham, a faultless climate, neither too hot in summer nor too cold in winter, with ample supplies of pure drinking water, available by gravity, adapted to a cheap and perfect system of drainage, and surrounded on three sides with a fertile and cultivated region capable of furnishing large supplies of cheap food products, it will be hard to find anywhere a fairer or more attractive site for building up an inland industrial town, or where a large working population can be more happily and comfortably fixed. The important question now arises, what is there to form the basis of an industrial town, or support a large working population, and this naturally brings us to the consideration of the iron ores.

The ores of the Potsdam sandstones and of the Cambro-Silurian limestones have received large attention at the hands of the geologists.

Prof. Prime, in his reports to the Second Geological Survey of Pennsylvania (see vols. D. D. 2 and 182, D. 3), covers the ground very fully, and very much what he says as to conditions met with in Pennsylvania apply as well to this locality. Mr. Andrew S. McCreath, in his "Mineral Wealth of Virginia" (page 44) gives a terse description of the ore openings seen by him on this particular property. In 1885, Prof. J. L. and F. D. Campbell, of the Washington and Lee University, of Lexington, Va., made a careful examination of the Buena Vista estate, giving a full report. It is not within the province of this paper to consider the geological conditions, except incidentally, as indicating quantity. The accompanying section, taken from Prof. Campbell's report, is intended to give a profile view of the rocky strata of the region, with their ore beds, supposed to be cut to a great depth.

"The strata of sandstones are denoted on the section by dotted bands, those of shale and slates by ruled bands, and those of limestone by blocked bands, while the beds of ore are indicated by \* \* \*."

At many places along the flank of this mountain range only a single outcrop of these ferri-ferous shales is found, but here, in consequence of wavelike irregularities in the strata, together with subsequent denudations, several successive exposures of shales and their ore-beds occur, giving access to a most unusual number of exposures where mining is comparatively easy.

By a westward or rather northwestward thrust all of these beds had the southeastern margins elevated, while a little way out from the mountains, and for many miles westward, all of the stratified beds were greatly disturbed, some wrinkled, some fractured and some even inverted."

What chiefly interests us is not how these ores get there, but how much of them are probably left. The so-called expert who wanders along an outcrop and sees some cross cuttings and exploration pits, and then talks about millions upon millions of tons of ore, is simply an ass, and shows his ignorance of brown hematite and mining in general. One man can see into the ground as far as another and no further, and the only way to arrive at precise notions as to quantity is by thoroughly opening up and proving the ground. At Buena Vista, while dealing with no figures, we deem it a fair presumption that large, very large, quantities of good brown ore are to be found there, ample,

[CONTINUED ON PAGE 39.]



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Correspond with Jas. W. Waters, Sec'y.

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We know that people flock to the booming sections, but still we do not want a boom, but a good, substantial and steady growth, such as we have had for the past ten years. The point is now reached with us that we can go no farther without capital to assist, and it will pay capital to investigate what we have to offer.

New Berne is now offering every inducement possible to aid manufacturing investors who will establish enterprises adapted to the natural advantages of this section. Address

**Secretary New Berne Board of Trade****Charlottesville, Va.**

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DESIRING

**TO LOCATE SOUTH.**

Railroad Facilities, Cheap Rates and Rapid Transportation to all Points Unexcelled. Perfect Climate. Unlimited Supply of Excellent Water. Gas, Electricity and Street Railway. Free Schools and Churches. Different lines of Manufacturing Enterprises already in successful operation here. A Live and Growing Place.

Home capital will join in the establishment and operation of factories.

Come and see, or write to

**JNO. M. WHITE, President,**

Charlottesville Industrial and Land Improvement Co., Charlottesville, Va.

## To Those Looking —FOR— Manufacturing Sites IN THE SOUTH.

The most desirable locations in the South for manufacturing wagons, stoves, agricultural implements, furniture, or for foundries, machine shops, rolling mills and nail works, glass works, cotton or woolen mills, are to be found in Virginia along the line of the Norfolk & Western Railroad from Norfolk to Bristol, and upon its branch lines. Hard wood of every variety; cheap iron from the furnaces at Lynchburg, Roanoke, Radford, (to be built in 1889,) Pulaski and Ivanhoe; cheap coal and coke from the celebrated Pocahontas Flat Top field; glass sand from Tazewell county; cotton from the markets of the Southern States, and wool from all the Western and Southwestern States and Territories, at advantageous freight rates. Favorable freight rates made upon raw materials to all factories established upon its line, as well as to points in the United States and Territories upon the manufactured articles.

Those seeking new fields for manufacturing establishments should not fail to investigate the wonderful development in iron, coal and coke industries that has been made within the past five years along the line of the Norfolk & Western Railroad, and the advantages offered by the State of Virginia in the supply of cheap raw materials; by the Norfolk & Western Railroad in the matter of freight facilities and rates upon raw materials, and for reaching home, far distant and foreign markets, and by the cities and towns along its line in the way of advantageous sites at moderate cost. Many of the cities and towns exempt manufacturing establishments from taxation for a series of years.

For further information as to freight rates and sources of supply of raw materials, apply to A. POPE, General Freight Agent, Roanoke, Va., or to

**CHAS. G. EDDY,**  
Vice-President, Roanoke, Va.

## RADFORD, VA.

**Town Lots, Mineral Timber and Farm Lands.**

We have many large and small tracts.

Iron Ore, Coal, Glass, Sand, Marble, Building Stone, and Several Mineral Springs, of Wonderful Curative Properties.

The best of farming and grazing lands. No malaria. No mosquitoes. Salubrious climate. Gorgeous scenery. Water power unlimited. Factory sites donated. Property at first hands, so get in on "rock bottom." Write to, or call on

**BARCLAY & CROCKETT,**  
The leading Real Estate Agents of Southwestern Virginia, RADFORD, VIRGINIA.

## FLORENCE, ALABAMA.

Investments in Stocks, Bonds and Real Estate. Correspondence solicited. Information gladly given. Address

**DILLARD & WALTON,**  
Florence, Alabama.

## SUMTER South Carolina,

is situated in Sumter county, midway between Florence and Columbia—40 miles from each—95 miles from Charleston, 125 from Augusta, Ga., and 125 from Wilmington, N. C., in the heart of an

**EXCELLENT AGRICULTURAL COUNTRY.**

It is on the Wilmington, Columbia & Augusta Railroad, and is the terminus of the Central of South Carolina as well as present terminus of the Eutawville Railroad, which is in course of construction to connect with railroads from Norfolk, with prospects of another in the near future.

It has a rapidly-increasing population, which at present numbers about 4,000.

**ITS HEALTH IS UNSURPASSED**

and it is one of the finest locations in the South for a

## Winter Resort

for those seeking refuge from the cold blasts of the North.

A \$50,000 HOTEL is now under discussion, and any reliable hotel man who would like to engage in the undertaking can learn of something to his advantage by addressing Mayor Mood.

## ICE FACTORY

is wanted; an Electric-Light Plant is now being put in, and Water Works are in progress.

Those seeking locations for

## HOMES

or business will do well to correspond with the people of Sumter.

**GEO. T. McWHORTER, President, Chickasaw, Ala.**  
**JAS. M. ALLEN, Secretary, Waterloo, Ala.**

**Capital Stock \$200,000.**

THE

**Waterloo Land, Mining & Mfg. Co.**

of Waterloo, Lauderdale Co., Ala.

will encourage the location of manufacturing and industrial enterprises in the town of Waterloo by donations of town lots, mineral and timber lands, and stock of the company. Persons who contemplate engaging in enterprises of this character in North Alabama are requested to consider the advantages, present and prospective, of this point before deciding to locate elsewhere. Waterloo is situated on the north bank of the Tennessee river, below Colbert Shoals and consequently at the head of summer navigation on said river. During low-water stage light draft steamers run from Waterloo to Florence, Sheffield and other points above the shoals, freight being transferred at Waterloo. At this season goods may be billed from St. Louis, Cincinnati, Louisville, Evansville and all Western river cities to Waterloo cheaper than to any other town in Alabama. Chickasaw excepted. Waterloo is in the heart of the mineral belt, the immense beds of iron ore of Wayne and Lauderdale Counties lying in close proximity (5 to 10 miles). Limestone, silica and kaolin are abundant and close. The largest area of virgin forest in North Alabama lies in sight. The Land Company owns large bodies of this, together with many valuable town lots. The water supply is abundant and pure. Scores of springs bubble up within the town limits and the limpid waters of Second Creek wash the eastern border. The health of the community is unexcelled and the cost of living cheap. This is the largest shipping point for tan bark in the state. Present price of bark at landing \$4.50 per cord. Special facilities for tanning leather. The Land Company will donate a large body of fine timber and mineral land in a block to secure the construction of a railroad, north or east from Waterloo, such a road being needed in connection with the unequalled facilities of water transportation enjoyed by the town. Liberal aid will be given to persons who will locate industries here that give employment to labor and add value to raw material.

No matter what you intend to manufacture, consult the Waterloo Land, Mining & Manufacturing Co. and learn what facilities for the prosecution of your business the place enjoys and what inducements will be offered you to come. All questions truthfully and fairly answered.

For further information consult the President, Secretary or Hon. Hiram Richardson, Vice-President, Waterloo, Ala.

## WANTED IMMEDIATELY.

## Planing MILL,

WEST

**LYNCHBURG.**

Within Short Distance—mile  
and a half—of Norfolk &  
Western and Richmond  
& Danville Railroad,

Line of Belt Railroad between  
them, now constructing.

## Magnificent Forest

## VIRGIN TIMBER.

In the Heart of New Town,  
where Building will be Active  
and on edge of a

**PROGRESSIVE CITY**  
of 25,000 people.

## Extraordinary Opportunity

**First Planing Mill.**

Address immediately

**Lynchburg Land Co.**  
**LYNCHBURG, VA.**

# Anniston

THE CENTER OF  
Iron and Cotton Industry  
AND MINERAL WEALTH.

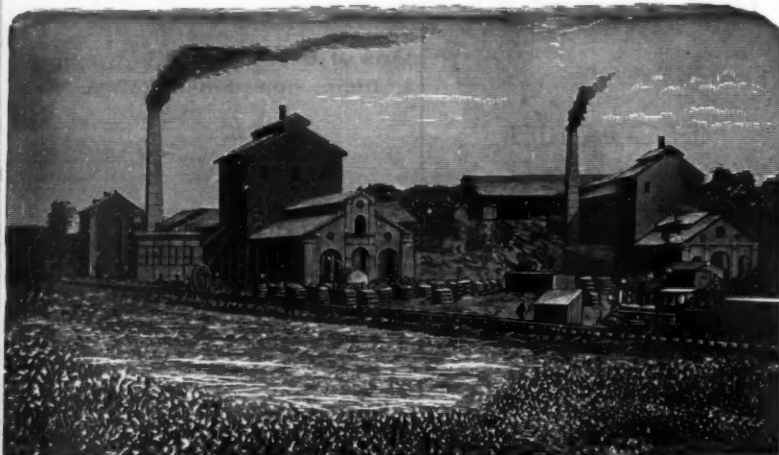
"The Model City of the South."

## IT IS

The Profits of Labor only that can add to the wealth and prosperity of a nation or community. It is this only that can make business successful and profitable, sustain and add to the value of real estate.

## WHERE

Nature's resources are greatest, where nature's capital in rich agricultural lands, and where iron, coal and other useful minerals are most abundant, most accessible and of superior quality for all purposes, there will capital find its safest investment, largest returns and labor reap its richest reward. It is to the Anniston District where the best professional mining engineers and experts of the United States declare the great center of the Iron Industry of the South will drift, where its manufacture will be most permanent and profitable, and where ores in the greatest abundance and accessibility exist, and where they will be most easily mined, that this applies.



WOODSTOCK FURNACES—ANNISTON.

## The Development of the Past Fifteen Years

Confirms all this, and every year convinces the experts of the correctness of their judgment. It is no longer opinion based on scientific and practical education; it is a fact that is clearly and successfully demonstrated, so that the visitor to the Anniston District can see at every step. The four iron furnaces that have been so long and successfully operated, and the new plant now being erected, and rapidly approaching completion, which will be capable of producing one hundred thousand tons of pig iron a year, demonstrate that

## NOWHERE ELSE IN THE SOUTH

Has the iron industry been so profitable and so successful, or been established on so permanent a basis, and of no district is this so universally conceded by all, while nowhere else have arrangements been perfected and already established on so complete a scale to work the crude iron into higher branches of manufacture to increase its value, and to bring into the district the profits of skilled labor. THE GREAT CAR WHEEL WORKS OF NOBLE BROS. & CO., their rolling mill and steam forge and machine shops, and the Alabama Car Works, have been absorbed by the

## UNITED STATES ROLLING STOCK COMPANY,

With a capital of \$4,000,000, for the purpose of adding to and enlarging the entire plant to build TWENTY CARS A DAY. Everything that goes into the creation of a car, except the tin for the roof and the wire nails, will be created from Anniston's crude material by her labor and skill. Fifty tons of wheel iron will be made into car wheels daily, twenty tons into car axles, fifty tons of pig iron into car and other castings, and fifty tons into bar iron and bolts, making nearly ten thousand dollars per day added to the wealth of the country by profitable labor converting nature's capital to the use of man. This company have a capital of \$4,000,000, and their Anniston works will represent a cash outlay of \$1,000,000. One thousand skilled mechanics will be employed as soon as the great enlargements under way can be completed.

## THE STEEL BLOOMARY

Consumes and increases the value of twenty tons of pig iron per day, while the Pipe Foundry converts to the use of man TWO HUNDRED TONS OF PIG IRON PER DAY in one of the largest and best planned and most convenient labor-saving works on this continent. The Foundry of Murray & Stevenson, Engine and Machine Works of Pinder & Co., and Boiler and Sheet Iron Works of J. & D. Noble, all add to the consumption of crude material by the creation of finished work.

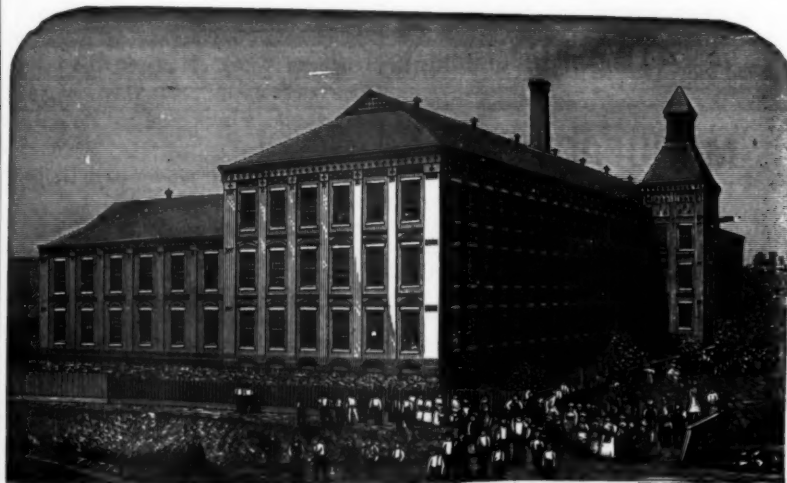
## NOR IS IT TO IRON ALONE

That Anniston relies for increase of wealth and population. The Cotton Factory, with eleven thousand seven hundred spindles and three hundred and seventy-five looms, employing over three hundred and fifty operatives, adds greater value to the products of agriculture by converting six thousand bales of cotton into cotton cloth. The immense ninety-inch Morse Cotton Compress, with its brick warehouses, is fast making Anniston a cotton market and commercial center, and aiding its wholesale and retail merchants to extend and hold the trade of the country tributary to Anniston that its system of railroads has opened to them. The Georgia Pacific, the East Tennessee, Virginia & Georgia Railroad systems,

## Give Direct Communication and Through Rates

To all parts of the country, while the Anniston & Atlantic Railroad, built by Anniston capital to open up new agricultural and mineral resources, gives Anniston, by connection with the Central of Georgia system, communication with the Atlantic sea coast and the new Anniston & Cincinnati Railroad, built and owned by Anniston citizens, opens up new resources and connections, and a shorter line with the great Northwest.

The proposed extension of the Anniston & Atlantic Railroad to Blocton will give another and shorter line to the great Cahaba Mines, producing the very best coal for domestic and manufacturing purposes in the South. Forty thousand acres of these coal lands, upon which a million and a half dollars have been lately spent in opening new mines and building several hundred coke ovens, ALL OWNED AND CONTROLLED BY ANNISTON CAPITAL, and developed to mine and manufacture three thousand tons of coal and coke per day, secures to Anniston for generations to come a full and certain supply of cheap fuel for all her industries, operated where a rich agricultural country can feed a manufacturing and commercial people, and where the



ALABAMA MANUFACTURING COMPANY'S COTTON MILL—ANNISTON.

## Best, Healthiest and Most Invigorating Climate in the World,

With mountain air and pure water, and an elevation of nine hundred feet above tide water, insures the health and comfort of the workman and his family; where health and comfort stimulate and lighten labor, and secure to it and its industries the reward due to both. It is these advantages which have been given by nature that enabled Anniston's citizens to create her past and present prosperity, and which secure her future. It is that they may participate in and avail themselves of these advantages that Anniston invites NEW CAPITAL AND TALENT AND ENERGY from all sections. We invite all to come and see, and on the spot to judge for themselves of Anniston's great resources and possibilities. The comfort and quiet of the famous Anniston Inn will make a visit to our city a treat and pleasure. Any information, attention and courtesy will be given and shown by addressing or applying to the

ANNISTON CITY LAND CO., Anniston, Ala.



# SOME FACTS ABOUT FLORENCE, ALA.

Florence is in North Alabama, near the Tennessee line, on the Tennessee river, which is navigable here for large steamers. It is on the Memphis & Charleston Railroad, and the Nashville & Florence branch of the Louisville & Nashville Road.

There are many other places in the South possessing the advantages of a good climate, healthfulness, natural resources and manufacturing capabilities more happily combined and in a higher degree than can be found in any other part of the country. It is believed, however, that at no point in the South, and hence nowhere in America can there be found an aggregate of so many unsurpassed advantages and attractions as exist at Florence.

Florence can make iron as cheaply as any place in Alabama. It has facilities for the manufacture also of cotton goods equal to those of any other place. Anything that uses wood as a raw material can be made here at as low a cost as anywhere in the South.

Thousands of acres of iron ore of a high grade within a few miles of Florence are owned by Florence companies. Limestone is quarried within the town limits. There is enough of it to last for ages.

Cotton mills would get a large part of their supply from the country around Florence. Cypress creek furnishes water power and mill sites enough to make Florence the Lowell of the South.

North of Florence, and up the Tennessee river, there are large areas of timber, embracing a wide variety of hardwoods—forests that the ax has never touched.

Besides its industrial possibilities, Florence is a point of great commercial importance, and could be made the center of an enormous mercantile business. It has the advantage of both rail and river transportation and of competing railroads. Certain railroad movements are in progress now that will give it direct communication in every direction and by different lines.

Florence is surrounded by a wide extent of fertile and productive country, as well adapted for farming, stock raising, fruit growing, truck farming, dairying, &c., as any in the world. Further, it has a climate that is delightful the year round. Its health record cannot be surpassed. It has no malaria. In fact, people who live here enjoy a remarkable exemption from ailments of every sort. It has an abundance of the purest water.

For beauty of location Florence is without a peer. The Tennessee river at this point is as romantic and beautiful as the Hudson. The rolling character of the country, the slopes and hills and alternating valleys furnish a picture to charm an artist's eye. The lovely Cypress creek, a deep and rapid stream emptying into the river just below the town, presents at every turn in its tortuous course a scene of entrancing beauty. The views from some of the higher hills are as fair as the eyes of man ever rested on.

Florence is making more rapid progress, proportionately, than any other town in America. This is a strong statement but it is true. And its growth is on a solid and permanent basis.

Florence is not undergoing any wild real estate boom. Its managers are not seeking to advance real estate prices. It is not their plan to get a quick return for the money they have invested, by the rapid sale of lots at unnatural prices. It is their aim to first build up a town, to locate factories and secure a permanent population, when land will have an actual value and sell at prices from which there will not be a subsequent disastrous reaction. At present real estate is much lower in price than in any other town in the South that has made half the progress Florence has made.

Since the first of September, 1888, over 25 industries have been located at Florence, with an aggregate cash capital exceeding \$2,000,000. This remarkable growth is the result of efforts to induce people to simply investigate the attractions of Florence. Investigation and comparison with other places, on the part of any who are looking for a place in the South to locate, will in nearly every case result in the selection of Florence.

The following are some of the industries in Florence. Some of these are in operation; others are nearly ready for work and others have but recently commenced work on their buildings: A furnace about ready to go into blast, and another partly constructed; a stove factory; a hardware company, with a capital of \$300,000 to manufacture fine building hardware, &c.; a wagon factory, with capital of \$150,000; an agricultural implement works; a handle factory; a woodenware factory; a sash, door and blind factory; a cedar bucket factory; a pump factory; planing mills; a factory to make wooden butter plates such as grocers use; a flour mill; a cotton mill; a jeans factory; a gingham factory; a woolen mill; a cotton gin; a marble company; a roofing and paint company; a shoe factory; a suspender factory; a corn press, packet and ferry company; three building and loan companies; a canning factory; several brick factories; a dummy railroad company, and several other enterprises.

The aggregate capital of the industrial, mercantile and development enterprises in Florence exceeds \$15,000,000.

A year ago the population of Florence was 2,000. It is now more than 8,000.

There are more than 1,100 carpenters at work in Florence and they can't build houses fast enough to keep up with the increase in population. Before the first of January next there will be 15,000 people living here.

Limited space allows here only the briefest summary of a very few of the more important facts about Florence. For more detailed information write to any of the following companies. Or better still, come down and see for yourself. Investigation is all that Florence asks or needs.

Railroad and Improvement Co.

Lauderdale Manufacturing Co.

Cotton and Iron Co.

Florence Investment Co.

# NEW DECATUR,

## ALABAMA.

### The New Industrial City of the Great Tennessee Valley.

#### DESCRIPTION OF ENTERPRISES ALREADY ESTABLISHED:

##### 1. The United States Rolling Stock Company's Plant.

For full description see back numbers of the "Record"—June 1, 8, 15, 22, 29.

##### 2. The Louisville & Nashville Railroad Company's Shops.

For full description see back numbers of the "Record"—July 6, 13, 20, 27; August 3, 10.

##### 3. The Southern Horse Nail Company.

R. H. BALLINGER, President.....New Decatur, Ala.  
W. W. LITTLEJOHN, (Cashier 1st Nat'l Bank) Treasurer.....Decatur, Ala.  
R. A. BALLINGER, Acting Secretary.....New Decatur, Ala.

J. A. BREWER, Agent.....Great Barrington, Mass.  
EDWARD BAILEY, Agent.....903 Chestnut St., St. Louis, Mo.  
JONAS TAYLOR, Agent.....Nashville, Tenn.

This company manufactures horse-shoe nails by a new and improved process, and of a greatly superior quality. Their plant has been in operation only a few months, yet has already turned out and sold 1,500 boxes of nails. It has 10 furnaces, of a combined capacity of about one ton per day. The buildings are situated on the Manufacturers' Switch-track, and are of brick and stone, of the most substantial and permanent character. The dimensions of the main building, which has a metal and truss roof, are 44x183 feet, and of the engine house 30x30. The company has already established a market for its product in New York and Massachusetts, south of the Ohio and west of the Mississippi, and after careful tests by experi-

enced smiths the nails have met everywhere with unqualified approval. The material used is the best Norway and Swedish product, the best soft steel in the world, imported for the purpose. The nails are hot forged, and it is claimed for them, and has been proved by ample tests: 1. That they are the best driving-nail made. 2. They will not split, bend or sliver, which is a frequent cause of lameness. 3. They are perfect in finish and shape, having well formed heads, fitting the shoe perfectly, and never growing loose by wear. 4. They are perfect in toughness and ductility, being hammered in forging similarly to the old fashioned hand-made nails.

##### 4. The Decatur Iron Bridge & Construction Company.

This company was organized during the year 1887, and erected their plant during the summer and fall of that year, on an admirably located tract of land covering about fourteen acres, fronting the Tennessee river. The buildings are connected by switch tracks with the Louisville & Nashville and the Memphis & Charleston Railroads, thus affording ample facilities for transportation by rail to and from all points North, South, East and West, and by water to and from all points on the Tennessee, Ohio and Mississippi Rivers. The machinery and all appliances are of the latest design, new and in perfect order, and ready for operation. The plant was operated successfully for several months, but the company was compelled to

suspend operations, simply and exclusively for want of capital, at a time when they had very large orders on hand, and were assured of permanent success. This plant, as described below, is now for sale, and can be purchased at a bargain. Manufacturers possessing sufficient capital and the necessary practical experience, can find no better or more profitable investment anywhere in the New South than this splendid plant, situated as it is in one of the very best locations in the country for that purpose. For further information apply to the First National Bank, Decatur, Ala., or to the Exchange Bank, New Decatur, Ala.

#### DESCRIPTION OF THE PROPERTY.

The property consists of about fourteen acres of land, a main building (of corrugated iron) 90x300 feet, and two "Ls" 60x75 feet each, in which is all the necessary machinery, new and in good order, for carrying on the business of bridge building and iron construction.

The real estate, independent of the improvements, has been valued by competent persons under oath at \$44,600, and the buildings, machinery and other improvements cost, according to the company's books, \$63,300, making in all a value of \$107,900.

In addition to the main building mentioned there is a brick pump house on the river bank, a stable and carriage shed, and a two-story frame office building 32 feet square, finely furnished, heated by steam, and provided with all necessary furniture and fixtures.

A side track from the Memphis & Charleston Railroad is laid alongside of the shops, convenient for loading and unloading material, and the tracks of the Louisville & Nashville Railroad also cross the property of the company. The cost of improvements is made up as follows, viz:

Buildings, grading and fencing.....	\$24,446 87
Furniture and fixtures.....	595 48
Machinery, engines, boilers and pumps.....	18,115 52
Hand tools and iron templates.....	3,669 88
Shafting, pulleys and belts.....	6,816 25
Cranes and travelers.....	2,523 31
Furnaces and forges.....	647 13
Pipes (air, steam and water).....	635 55
Hammer dies.....	351 04
Tracks, cars and turn-tables.....	1,886 90
Platforms and skids.....	963 95
Scales.....	975 53
Electric-light plant.....	1,034 23
Anvils, formers and sledge blocks.....	922 43
Miscellaneous.....	1,998 16
Total cost.....	\$63,300 31

#### THE FOLLOWING IS A LIST OF THE PRINCIPAL TOOLS SET UP IN PLACE, VIZ:

One 60 Horse Power Engine, with boiler.  
One Blakeslee Bolt and Rivet Header and Upsetting Machine.  
One 36 in. x 36 in. x 9 ft. New Haven Planer.  
One Hillis & Jones 6 in. Double Angle Shears.  
One 1,100 lb. Single Stand Morgan Steam Hammer.  
One No. 3 Hillis & Jones Single Punch, complete.  
Two 30 in. x 8 ft. bed Rotary Planers, Leighton & Burch.  
One Single No. 3 Long & Alstatter Punch, 13 in. d.  
One Single No. 3 Long & Alstatter Punch, 6 in. d.  
One Kellogg & Maurice Steam Riveter.  
One Allen Air Riveter, with Steam Compressor and Air Receiver complete.

Two 36 in. Back Geared Feed Prentiss Drills.  
One Wheel Feed Prentiss Drill Press, 16 in.  
One Reid Engine Lathe, 16 in. x 8 ft. No. 77.  
One Reid Engine Lathe, 16 in. x 6 ft. No. 95.  
One 15 in. Handy Shaper Tilt Table.  
One Set Bending Rolls, 12 ft. clear.  
One 3½ Single, class A, Acme Bolt Cutter.  
One No. 10 Bolt Cutter, complete. (Wells Bros. & Co.)  
Two 8,000 pound Harrington Hoists.  
One 6,000 pound Harrington Hoists.  
One Westinghouse Electric Light Plant, 100 lights.

One Bullard Punch Grinding Lathe.  
Two Emery Grinders.  
One Wood Boring Machine.  
One Circular Saw.  
One No. 4 Sturtevant Moss. Blower.  
One Dellamater Steam Pump.

In addition to the larger tools above mentioned, there is a large assortment of small tools, consisting of Drills, Wrenches, Hammers, Sledges, Tongs, Shovels, Pinchers, Dies and Taps, Calipers, Files, Cutters, Heading Tools, Lathe Tools, Chucks, Vices, Planer and Shaper Tools, Screw Jacks, Anvils, Formers, Augers, Bits, Reamers, etc., etc.

For Maps, Pamphlets and other Information about New Decatur, address

## The Decatur Land, Improvement & Furnace Company, New Decatur, Alabama.



# DENISON, TEXAS.

The "Yankee" City of the Southwest,

— AND —

✻ GATEWAY ✻

— TO THE —

## GREAT STATE OF TEXAS.

The City of Dennison presents the Finest Opportunity of any City in the Southwest for the Investment of Capital in Large or Small Sums.

**D**ENISON is situated in Northeastern Texas near inexhaustible beds of coal and iron, surrounded by the finest fruit lands in the world, and adjoining the INDIAN TERRITORY, which, in the nature of things, must in a few years be opened to settlement.

The growth of Dennison has been a natural one, the city having reached its present size—16,800 population—in sixteen years.

The city is regularly and beautifully laid out. Railroads run from it in four different directions. The Missouri, Kansas & Texas alone does an enormous business, having 54 miles of switch track in Denison, employing 500 skilled workmen and disbursing \$150,000 a month in wages.

The first public school in the State was established here, and the city's elegant two and three story brick school buildings, surrounded by attractive grounds, are well arranged for the use of the white and colored children. Its schools are in session ten months in each year.

We have sixteen church societies, seven of which are colored.

The city is well supplied with pure water from its numerous private wells—dug in the ground—and its first-class system of water works, giving the citizens ample protection against serious loss by fire, and enabling the insurance companies to rate the city first class as to fire hazard. Rate of taxation low.

The city has four miles of street railway, with six miles now building to be operated by steam motor; has two electric light companies and a telephone plant. It has an influential New England colony, and counts among its citizens people from every State in the Union.

A large hotel, to cost \$125,000, is to be erected here this year, and a large steel plant with \$2,000,000 of capital is contemplated.

30,000 bales of cotton were shipped from Denison in 1888. 200,000 baskets of strawberries and several carloads of peaches and other fruits have been shipped to market this season.

The Denison Canning Co., capitalized at \$100,000, has just been organized, and ground has been broken for a large fruit and vegetable canning factory.

A cotton mill company is being formed with a capital of \$500,000. Denison citizens have subscribed \$150,000 to this enterprise; Eastern capitalists will add \$350,000.

The climate of Denison is magnificent, situated nearly 800 feet above sea level. In summer it is warm, but far cooler than many cities farther North, and from 6 P. M. until after sunrise it is always cool. The city is very healthy.

The capacity of the ice factory is being increased from a daily output of 15 tons to 30.

The Denison Land & Investment Co. is prepared to give every reasonable encouragement to manufacturers, and solicit correspondence from such manufacturers as contemplate coming into the Southwest to locate.

Address all communications to

## THE DENISON LAND & INVESTMENT COMPANY, DENISON, TEXAS.

Paid-Up Capital, - - - - - \$1,200,000.

### OFFICERS:

W. P. RICE, President.

MILTON H. FRENCH, Vice-President and General Manager.

ARTHUR L. BERRY, Secretary and Treasurer.

### DIRECTORS:

W. P. RICE, Kansas City, Mo.  
J. M. FORD, Kansas City, Mo.  
A. R. COLLINS, Denison, Tex.

B. J. DERBY, Burlington, Vermont.  
PAUL LANG, Oxford, N. H.  
M. V. B. CHASE, Augusta, Maine.

MILTON H. FRENCH, Thomaston, Maine.  
A. H. COFFIN, Denison, Texas.  
JOS. B. LINCOLN, Boston, Mass.

# Morristown, Tenn.

## The Plateau City of the Great Valley of East Tennessee

is beautifully located on a plateau of Bay's Mountain, about equi-distant from the Cumberland Mountains which bound East Tennessee on the northwest, and the Alleghany Mountains which bound it on the southeast, and is 300 feet above Holston River, which washes the north base of the plateau three miles from the city. Its mean elevation above sea level is about 1,350 feet, while the hills and mountains immediately surrounding it rise to an altitude of 1,935 feet, affording views of surprising extent and grandeur, and at the same time so modifying the temperature that the thermometer rarely registers higher than 90° in summer or lower than 10° in winter. Its drainage is admirable, and malaria is unknown. It has nearly trebled its population since 1880, having now about 4,000 inhabitants. It is the commercial and business center of the richest and most extensive agricultural district in the State, where all the cereals and all the grasses

and tobacco are grown to perfection, and where fruits and berries abound. It has hundreds of thousands of acres of uncultured forests accessible to it, abounding in Poplar, Pine, Hemlock, six varieties of Oak, Chestnut, Hickory, Cedar, Maple, Birch, Beech, Sycamore, Gum, Locust, Laurel, Buckeye, Mulberry, Ash, Cherry and Walnut. *The Celebrated East Tennessee Marble* underlies a part of the city, and it is surrounded with rich deposits of Iron Ore, Manganese Ore, Zinc Ore and Lead Ore. It has been said by one who has made a study of the subject, that within a radius of 50 miles around Morristown every variety of iron ore in the United States can be duplicated, and a coke can be made equal to Connellsville coke. We claim without hesitation that Morristown has in its immediate vicinity richer mineral ores, and a greater variety of them, than any city on the Continent.

### MORRISTOWN

has Railroad Facilities equal to any city between Lynchburg and Chattanooga, and they will be speedily increased by the completion of the Carolina, Cumberland Gap & Chicago Railway, making the shortest possible railway route between the great cities on the Ohio River, Cincinnati and Louisville, and the seaboard cities, Charleston, Port Royal and Savannah. Besides, the Baltimore & Ohio Railway will probably extend a branch to it from Lexington, Va., and the Tennessee Midland will in all probability be built to Morristown, and a line be built giving direct connection with Atlanta.



MAP SHOWING RELATION OF MORRISTOWN TO THE COUNTRY AT LARGE.

### MORRISTOWN

has a citizenship composed almost exclusively of native born Americans. It boasts a splendid system of Graded Schools, Five Commodious Brick Churches, the finest Courthouse in Upper East Tennessee, an Opera House that will seat 600 people, two Solid Well Managed Banks, a flourishing Building and Loan Association, two of the Largest Commercial Flouring Mills in the South, Stove Works, an Agricultural Implement Factory, two Woodworking Factories, a Tobacco Factory, a Carriage and Wagon Factory, and many industries of lesser note.

It is lighted with electricity, and has water works under contract, and is now inaugurating a system of street railways. Its climatic advantages, its unsurpassed record for healthfulness, its abundance of pure water, its central and beautiful location, its transportation facilities, its fruitful agricultural surroundings, its contiguity to rich and exhaustless fields of iron, manganese, zinc and lead ores, marble, coal and timber, mark it as a place destined to be the commercial, manufacturing and railway emporium of Upper East Tennessee, Western North Carolina and Southeastern Kentucky.

To expedite this destiny the city authorities have wisely exempted from taxation for ten years all manufacturing establishments that will give employment to fifteen or more persons, and the county authorities have done the like, so that manufacturing establishments will be exempt from all taxation for ten years, except the merely nominal tax for State purposes. There has been no "boom" or inflation of prices at Morristown, and, as it possesses within itself and contiguous to it almost every element of wealth, it now presents the most inviting field for investment of any city in the South.

*Persons who may desire fuller information can obtain it by calling on or addressing*

## MONTVUE LAND COMPANY

POSTOFFICE BUILDING, — MORRISTOWN, TENNESSEE.



# FORT PAYNE, Alabama.

★ COME TO ★

## The NEW ENGLAND CITY of the South.

Climate Unsurpassed. Abundance of Pure Water. Drainage Excellent.

No Better Point in the Union  
For Safe and Profitable Investment.

Situated on the MAIN LINE of the QUEEN & CRESCENT ROUTE, fifty-one miles Southwest of Chattanooga, and ninety-one miles North of Birmingham.

Elevation is from 895 to 1,600 ft above the sea, and above fever districts.

DeKalb County is entirely free from debt; taxes light.

Most liberal encouragement given to industries of every kind.

Iron Furnace and Rolling Mill will be constructed immediately, and other industries of various kinds are under contract.

Correspondence solicited from those who contemplate coming into the South to establish any kind of manufactories.

The different industries will employ at least two thousand skilled workmen, which will secure a population of over ten

thousand, independent of the many industries contemplated.

Iron of the best quality can be manufactured at as low cost per ton as in any other locality in the South.

Coal and iron are being developed rapidly of a superior quality.

Fine timber abundant and wood-working machinery of every kind can be profitably employed at this point.

The Company is prepared to give every reasonable encouragement to manufacturers who will locate at this point.

✍ Correspondence solicited.

### CAPITAL \$5,000,000.

#### OFFICERS.

President,	- - -	COL. J. W. SPAULDING
First Vice-President,	-	HON. D. H. GOODELL
Second Vice-President,	-	HON. HENRY B. PEIRCE
Secretary,	- - -	C. L. T. STEDMAN
Treasurer,	- - -	F. H. TOBEY
Manager,	- - -	C. O. GODFREY

#### BOARD OF DIRECTORS.

HON. D. H. GOODELL, of Goodell Mfg. Co., Antrim, N. H.  
 HON. HENRY B. PEIRCE, Secretary of State of Mass.  
 GEN'L SELDEN CONNOR, Ex. Gov. of Maine, Pres.  
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 W. P. RICE, Pres. Union Investment Company of Kansas  
 City, resides Fort Payne, Ala.

## FORT PAYNE COAL & IRON COMPANY, Fort Payne, Ala.

# SHEFFIELD, ALA.

## The Iron Manufacturing Center of the South.

At the head of navigation, on the Tennessee River, Sheffield is the natural outlet for the mineral and manufacturing products of Alabama and the neighboring States seeking a water route to points on the Ohio and Mississippi Rivers, and to the Gulf of Mexico, as well as the best distributing point over Alabama, Eastern Mississippi and East Tennessee, South Carolina, Georgia and Florida for Northern and Western produce, groceries, provisions, machinery, &c. Three Railroads already completed and in operation, and several others assured. **Principal shops of the Memphis & Charleston Railroad**, in which cars and locomotives are to be built, are under contract to be erected here. These will employ between four hundred and five hundred mechanics, and consequently, with their families, will make an increase in population of at least two thousand people. Shops of three other railroads are contracted to be located here, some of them being now under construction.

## Five Completed Blast Furnaces,

HAVE A CAPACITY OF 700 TONS PIG IRON PER DAY.

Experts do not hesitate to say that iron can be manufactured more cheaply at Sheffield than at Birmingham, and its river transportation facilities will enable Sheffield iron to reach the principal markets at a saving of from

**\$2.00 TO \$2.50 PER TON.**

The quality of the iron produced is pronounced by consumers to be the best from any furnaces in the South.

### The following are among the Corporate and Private Enterprises belonging to Sheffield:

- |  |   |  |
|--|---|--|
| 1 The Sheffield Land, Iron & Coal Company, capital \$1,000,000.  | 14 The Sheffield Mineral Paint Company, \$50,000.     | 35 Knowles Knitting Mill, \$30,000.                    |
| The Sheffield & Birmingham Coal, Iron & Railroad Company, capital \$7,500,000, owners and operators of three blast furnaces, the Sheffield, the Sheffield & Birmingham Railroad, coke ovens and coal mines near Sheffield. | 15 The Sheffield Agricultural Works, \$40,000.        | 36 Sheffield Tapestry Works, \$40,000.                 |
| The Sheffield Furnace Company, capital \$150,000; assets \$500,000.  | 16 The Sandstone Quarry Company.                      | 37 Robbins Machine Shop and Foundry, \$50,000.         |
| The Lady Ensley Furnace Company, capital \$200,000.  | 17 The Sheffield Cotton Compress Company, \$60,000.   | 38 Sheffield Cotton Mill, No. 1, \$50,000.             |
| Enterprise Publishing Company, capital \$25,000; publishes daily paper with associated press report and weekly paper.  | 18 Millar Brothers, Steam Laundry.                    | 39 Owen Pink Mixture Company, \$100,000.               |
| 6 The Electric Light and Gas Fuel Works, \$25,000.   | 19 Water Works, already expended \$30,000.            | 40 Bell Telephone & Telegraph Company.                 |
| 7 The Sheffield Ice Company, capital \$25,000.   | 20 Sheffield Street Railway Company, \$50,000.        | 41 Fould's Shoe Factory, \$20,000.                     |
| 8 The Sheffield Manufacturing Company, \$30,000.   | 21 Sheffield & Tusculum Street Railway Co., \$50,000. | 42 Enterprise Wood-working Company, \$30,000.          |
| 9 The Sheffield Contracting Company, \$60,000.   | 22 First National Bank, \$100,000.                    | 43 The Sheffield Harness & Saddlery Company, \$30,000. |
| 10 The Eureka Brick & Lumber Company, \$30,000.  | 23 Cleveland Hotel Company, \$50,000.                 | 44 Principal Shops of the Sheffield & Birmingham R. R. |
| 11 The Sheffield Furniture Manufactory.  | 24 Sheffield Hotel Company, \$120,000.                |  |
| 12 The Howard & Busch Brick Company.   | 25 East Sheffield Land Company, \$500,000.            |  |
| 13 The Sheffield Bakery and Bottling Works.  | 26 Hull & Keller's Fern Quarries.                     |  |
|  | 27 Vorhees' Galvanized Iron Cornice Factory.          |  |
|  | 28 The Sheffield Quarries.                            |  |
|  | 29 Mobile Real Estate Company, \$50,000.              |  |
|  | 30 Sheffield Real Estate Company, \$125,000.          |  |
|  | 31 Sheffield & Mobile Improvement Company, \$100,000. |  |
|  | 32 Sheffield Stove Works, \$50,000.                   |  |
|  | 33 Henderson Milling Company, \$100,000.              |  |
|  | 34 Globe Iron & Brass Works, \$10,000.                |  |

Aside from the foregoing, the following are in course of construction and may be considered positive: Principal Shops of the Nashville, Florence & Sheffield Division of the Louisville & Nashville Railroad.

Reasonably certain to be secured in the near future are the following, in regard to which negotiations are pending: A Rolling Mill, a Large Machine Shop, a Cotton Mill, a Large Steel Plant.

## GOOD WATER.

## Free Public Schools and Churches

Drainage Excellent. Health and Climate Unsurpassed.

Splendid Opening for Men of Push and Energy.

No Better Point for Profitable Investment.

— NO "OLD FOGY" ELEMENT HERE. —

## Sites for Manufacturing Enterprises,

AND FOR FREE PUBLIC SCHOOLS AND CHURCHES.

Donated by Sheffield Land, Iron & Coal Company.

Population January 1st, 1887, 700; August 21st, 1887, by actual count, 2,583. Increase of population, 300 per cent. in eight months, and only limited by accommodations. Present estimate (August, 1888) fully 3,500. Four years ago the site of Sheffield was cultivated as corn and cotton plantations, and was without a railroad. Numerous two and three story brick business houses, and one and two-story dwellings have been, and are being erected. The class of buildings will compare favorably with those in cities of 20,000 inhabitants. Limestone of excellent quality for fluxing iron in unlimited quantities at the furnaces' sites. First-class building stone and brick clay abundant. Rich and extensive deposits of Brown Hematite iron ore within twenty miles, along the lines of two Sheffield railroads, which, by actual results in the furnaces, yield above 50 per cent. metal. Iron of high grade is being made with a pound of coke to a pound of metal—a result never before accomplished with Southern ores and coke. The Sheffield & Birmingham Railroad runs through the heart of the Warrior Coal Fields, which abound in first-class Coking, Steam, Gas and Grate Coal. Timber is abundant and cheap. The Memphis & Charleston Railroad, Sheffield & Birmingham Railroad, and Nashville, Florence and Sheffield branch of the Louisville and Nashville Railroad are now in operation into Sheffield. Surveys of three other railroads have been recently completed to Sheffield, which will soon be the best combined river and railroad transportation center in the South. Every merchant and every established manufacturing enterprise is doing a profitable business. More are needed. For further information address

WM. L. CHAMBERS, Vice-President and Manager,

**SHEFFIELD LAND, IRON & COAL COMPANY, - - - SHEFFIELD, ALA.**



# CONSTRUCTION DEPARTMENT

**WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.**

\*Means machinery is wanted, particulars of which will be found in "Machinery Wanted" columns.

†In correspondence relating to matters reported in this paper, it will be a favor if it is stated that the information was gained from the MANUFACTURERS' RECORD.

## ALABAMA.

Annistor—Stone-yard.—Robert Watt and James Gray will establish a stone-yard.

Asheville—Dummy Line.—The Asheville & Whitney Railroad Co., previously reported as to build a dummy line from Asheville to Whitney, will probably extend it to Greensport. They are receiving bids for building a bridge across the Canoe river.

Attalla—Water Works.—The Alabama Water Works Co. has been incorporated by Obal Christopher, J. Stewart and T. W. Gilmore to build water works.

Bessemer—Flour Mill.—Felix Leonard, of Indiana, has contracted with the Bessemer Land & Improvement Co. to build a flour mill.

Bessemer—Ice Factory.—The Bessemer Ice Manufacturing & Storage Co. will put in new 10 or 15-ton ice machine.\*

Birmingham—Printing.—The Evening News Co. contemplate putting a Gross perfecting press in their printing office.

Birmingham—Railroad.—The Birmingham Mineral Railroad will be extended to Huntsville, it is reported.

Birmingham—Railroad.—The Birmingham Mineral Railroad Co. will, it is reported, extend their road to Tuscaloosa at once.

Birmingham—Sash, Door and Blind Factory.—Northern parties contemplate moving their sash, door and blind factory to Birmingham. The East Birmingham Land Co. can give particulars.

Birmingham—Tinware Factory.—The Estes Sove Co. has been incorporated with a capital stock of \$4,000 for the manufacture of tinware, &c.

Birmingham.—It is reported that the Elyton Land Co. are negotiating to secure the removal to Birmingham of several English enterprises.

Birmingham—Brass and Iron Foundry.—Abbott & Co., of Bidefort, Devonshire, England, contemplate, it is said, moving their brass and iron foundry to Birmingham.

Birmingham—Stove Works.—The Baxter Stove Manufacturing Co. are enlarging their stove works.

Birmingham—Brewery.—The Birmingham Brewing Co. will shortly let contract for their brewery previously reported.

Brierfield—Coal and Iron.—The property of the Brierfield Coal & Iron Co., consisting of a coke iron furnace, rolling mill and nail works and 32,000 acres of coal and iron land, have been purchased by Thomas F. Kurtz and Thomas E. Peters, trustees for the bondholders, for \$600,000.

Centre—Mining.—The Alabama Mining Co. has been incorporated by W. C. and John Sibley, of Marietta, Ga., and J. A. Walden.

Centre—Iron Works.—The Stonewall Iron Works will be repaired and put in operation, it is reported.

Clay County—Gold Mining.—S. M. Lanier has leased and is developing the George Hobbs gold mines.

Decatur—Street Railway.—The construction of a new street railway is projected.

Florence.—A business men's association will probably be organized to encourage the establishment of new industries.

Florence—New Factories.—It is rumored that factories, aggregating over \$1,000,000 capital, have been secured recently, but no particulars are given.

Fort Payne—Tannery.—John Maxwell, of Boston, Mass., contemplates erecting a large tannery.

Fort Payne—Ice Factory.—The Fort Payne Ice & Storage Co., previously reported, have received and are placing in position the machinery for their ice factory.

Gadsden—Street Railway.—The Alabama Street Car Co. has been incorporated by Obal Christopher, J. S. Stewart and T. W. Gilmore to build a street railway from Gadsden to Attalla. The capital stock is \$25,000.

Gadsden—Mineral Lands.—J. H. Wiley is negotiating with English capitalists for the sale of 65,000 and 60,000 acres of coal lands. He is also in correspondence with Northern capitalists for the sale of 3,000 acres of iron ore lands.

Guntersville—Bridge.—The county commissioners will let contract for the construction of a new bridge September 2.

Hamilton—Ginnery.—A cotton ginnery is to be built. A. J. Hamilton is interested.

Huntsville—Bridge.—Contract for building a bridge over the Flint river at Wood's mill has been awarded to the Ohio Bridge Co., of Columbus, O.

Mobile—Gas and Electric-light Plants.—The Alabama Gas, Electric Light & Power Co., lately reported as receiving franchise to erect gas works and an electric-light plant, are negotiating for a site.

Mobile.—M. Cook, of Flint, Michigan, representing a company having a capital stock of \$1,000,000, is investigating the advantages offered for the location of steel works in Mobile to use Cuban ores.

Montgomery.—The Supreme Court has decided that the issuances of bonds by Montgomery and Autauga counties towards building the bridge over the Alabama river, previously reported, is unconstitutional, and the Montgomery, Tuscaloosa & Memphis Railroad Co. have decided to build it themselves.

Montgomery—Publishing.—Alva Fitzpatrick and James J. Crabbe contemplate publishing the Capital.

Montgomery—Publishing.—Horace Hood and J. B. Simpson have commenced the publication of the Journal.

Point Clear.—The Mobile & Eastern Shore Railway & Navigation Co. have purchased the Point Clear Hotel property through J. W. Glennon & Co., of Mobile. They will rebuild the wharf, improve the grounds and build their railroad at once.

Selma—Railroad.—The Cincinnati, Selma & Mobile Railroad will be bonded for \$2,000,000, it is reported, to complete it to Selma.

Sheffield—Horseshoe and Nail Factory.—Northern capitalists will, it is stated, establish a horseshoe and horseshoe nail factory with a capital stock of \$100,000. The Sheffield Land, Iron & Coal Co. can give particulars.

Sheffield.—The organization of a mortgage and investment company with a capi-

tal stock of \$200,000 by New England capitalists is reported. The Sheffield Land, Iron & Coal Co. can give particulars.

Sheffield—Furniture Factory.—A. M. Sargeant, of Haverhill, Mass., contemplates establishing a furniture factory.

Sheffield—Rolling Mill.—It is again reported that the necessary money has been subscribed for building the rolling mill previously mentioned. If true the Sheffield Land, Iron & Coal Co. can give particulars.

Sheffield.—A land and improvement company will probably be organized by Northern capitalists.

Sheffield—Woodenware Factory.—R. H. Hunt and R. B. Gibson, of Chattanooga, Tenn., will erect a woodenware factory. The capital is \$60,000.

Spring Garden—Ginnery.—The Amberson Gin Co., lately reported as to erect a cotton-seed oil mill, are improving their ginnery.

Spring Garden—Water Works.—The Spring Garden Water Works, Land & Improvement Co., previously reported as to build water works, are constructing a stand-pipe system of works.

Talladega—Street Railroad.—A street railroad is projected.

Troy—Fertilizer Works.—The Troy Fertilizer Co. have decided to increase their capital stock to \$150,000, as previously stated. They will probably enlarge works.

Troy—Cigarette Factory.—A cigarette factory will be started, it is rumored.

## ARKANSAS.

Arkansas City—Railroad.—The Arkansas & Gulf Railroad Co., previously reported, has been reorganized with W. R. Bergholtz, president, and J. F. O'Shaghnessy, treasurer. Efforts will be made to push the building of the road to Pendleton.

Bentonville—Distillery.—The establishment of a large distillery is talked of.

Hot Springs—Dummy Railroad.—A dummy railroad to Gillen's Springs is projected.

Little Rock—Sewerage System.—The Arkansas Pump & Pipe Co. have contract for constructing 4,000 feet of sewer in the city.

Little Rock—Railroad.—The Memphis & Little Rock Railroad Co., previously reported as contemplating extending their road to Hot Springs, will, it is stated, shortly begin work.

Lonoke—Ginnery.—P. N. Olinghouse is putting additional machinery in his cotton ginnery.

Lonoke—Ginnery.—Mr. Glover is enlarging his cotton ginnery.

Lonoke—Ginnery.—J. B. Chapline is putting additional machinery in his cotton ginnery.

Yellville.—The Buffalo Zinc & Copper Co. will shortly commence the development of their mines.

## FLORIDA.

Anthony—Shingle Mill.—J. A. Smith has started a shingle mill.

Arcadia—Canning Factory.—A company has been organized to build and operate a canning factory. J. W. Whidden can give particulars.

Fernandina.—The Fernandina Development Co. has been incorporated by E. N. Dickerson, Jr., C. W. Yulee, J. D. Palmer and S. A. Swann. They have purchased all the unimproved property of the Florida Town Improvement Co. upon Amelia island and will improve and develop same. The authorized capital stock is \$3,000,000.

Jacksonville—Cotton Mill.—Nearly all the stock of the \$100,000 company lately

mentioned as being organized to build a cotton mill has been subscribed for, and work will probably commence soon. C. H. Smith is interested.

Jacksonville—Candy Factory.—A. R. Paxton has purchased the candy factory of Littlefield & Steere. The latter will remove to Knoxville, Tenn., and establish a candy factory.

Key West—Artesian Well.—The Key West Water Co. has let contract for boring the 8-inch artesian well previously reported and building water works to the Shickle, Harrier & Howard Co., of St. Louis, Mo.

Millview—Saw Mill.—W. S. Wittich will, it is reported, build a saw mill with a daily capacity of 25 M feet.

Pensacola—Furniture Factory.—Messrs. Meriweather and Harwell are endeavoring to organize a stock company to establish a furniture factory.

St Augustine—Railroad.—Samuel Fox, contractor for the St. Augustine & Daytona Railroad, reports that engineers have been secured and work will commence at once.

Tampa.—The city council, previously reported as contemplating putting in an electric fire-alarm system, have adopted the Gomeywell system.

Tampa—Phosphate Works.—The Peruvian Phosphate Co., G. R. Boaz, president, will establish the phosphate works previously reported as projected.

Weslton—Brick Works.—Jeffcoat & Brown are building the brick works previously reported.

## GEORGIA.

Acworth—Sash, Door and Blind Factory.—Bruce Baker, of Alabama, is considering the erection of a sash, door and blind factory and a planing mill.

Athens—Railroad.—A railroad from Athens to Barnett Shoals is being surveyed.

Atlanta—Sash, Door and Blind Factory.—W. L. Traynham, O. O. Nelson, John L. Hopkins and others have incorporated the Traynham Manufacturing Co. for the manufacture of sashes, doors, blinds, etc. The capital stock is \$20,000.

Augusta—Electric Railroad.—The Augusta Street Railroad Co., controlled by Fleming, Thomas & Co., previously reported as to operate their road by electricity, are now investigating electric roads in other cities.

Augusta—Cotton Factory.—The Augusta Cotton Factory, previously reported as contemplating changing the style of their goods, have shut down to put in new machinery.

Augusta—Dummy Railroad.—The Richmond County Belt Line Railway Co., previously reported, expect to build 10 miles of road; have not purchased any materials yet.

Brunswick—Railroad.—The Turtle River Railroad Co., previously reported as applying for a charter, expect to build a railroad from Brunswick to the new docks of the East Tennessee, Virginia & Georgia Railroad, about 5 miles from Brunswick.

Brunswick—Cold-storage Warehouse.—The erection of a cold-storage warehouse is talked of.

Blythe—Cider Mill.—R. T. Atkinson has erected a cider mill.

Brownsville—Dummy Line.—A dummy line is to be built.

Canton—Mining.—The Chattanooga, Tenn., parties who recently purchased mining property from William Page, have put in new machinery and will soon commence operations.

Cartersville—Publishing.—A stock company has been organized to publish the Express.

**Carrollton—Paper Mill.**—L. A. Thomas, previously reported as organizing a stock company to build a paper mill of 6 tons daily capacity, has, with M. R. Wilkinson and E. P. McBurney, chartered the Wilkinson Paper Co., capital \$35,000.

**Cedartown—Woolen Mill.**—A company has been organized with a capital stock of \$25,000 paid in to build the woolen mill previously reported.

**Columbus—Cracker Factory.**—A stock company will probably be formed to establish a cracker factory.

**Columbus—Electric Railway.**—The Columbus Electric Light Co. are putting in the additional machinery previously reported. The Thomson-Houston Electric Co. have the contract.

**Columbus—Clothing Factory.**—G. J. Peacock is enlarging his clothing factory.

**Columbus.**—The Columbus Iron Works Co. have amended their charter, increasing the authorized capital stock from \$100,000 to \$200,000, and allowing a wider diversification of their product.

**Columbus—Street Railway.**—The Columbus Street Railway Co. have decided to extend their line, mentioned in last issue. The cost of the extension will be about \$4,000.

**Columbus—Shoe Factory.**—Efforts are being made to organize a stock company to establish a shoe factory.

**Cordele—Oil Mill and Fertilizer Factory.** The Cordele Cotton-seed Oil and Guano Co. have ordered the machinery for their cotton-seed oil mill and fertilizer factory previously reported.

**Covington—Terra-cotta Works.**—Dr. H. V. Hardwick has organized a stock company to establish terra-cotta works at Almand.

**Covington—Ginnery.**—A cotton ginnery has been erected.

**Covington—Compress.**—A stock company is being organized to erect a cotton compress.

**Dalton—Bridges.**—J. C. Norton will receive bids until September 16 for constructing a bridge over the Conasauga river at Zant's Ford, and until September 17 for bridge over same river at Upper King's bridge.

**Dublin—Publishing.**—Prof. Allen Allen will publish the Educational Advance.

**Gainesville—Bagging Factory.**—The Gainesville Cotton Manufacturing Co. will put in machinery to manufacture cotton bagging.

**Lexington—Brick-yard.**—A brick-yard will probably be started. W. M. Howard can give particulars.\*

**Macon—Brewery.**—The Macon Brewing Co., now building a brewery, have amended their charter, making their capital stock not less than \$150,000.

**Millen—Oil Mill and Fertilizer Factory.** A \$30,000 stock company is being organized to establish a cotton-seed oil mill and fertilizer factory. R. G. Daniel can give information.

**Newnan—Wagon Factory.**—L. M. Farmer and D. J. Folds have incorporated the Coweta Wagon Co. for the manufacture and repair of wagons, carts, buggies and other vehicles. The capital stock is \$10,000.

**Quitman—Publishing.**—The Free Press and the Herald have consolidated.

**Villa Rica—Wagon Factory.**—E. F. Roberts contemplates erecting a carriage and wagon factory.

**Villa Rica—Oil Mill.**—The Gate City Oil Co., of Atlanta, are building a ginnery.

**Waynesboro—Electric-light Plant.**—R. J. Edensfield contemplates putting a small incandescent light plant in factory.\*

#### KENTUCKY.

**Ashland.**—J. A. Haskell, J. H. Poage and others have incorporated the Forest Dale Fire-brick & Tile Works for the manufac-

ture of bricks and tiling and the development of mineral lands. The capital stock is \$40,000.

**Ashland—Publishing.**—J. M. Miller has commenced the publication of the Democrat.

**Cloverport—Natural Gas.**—The Mine Center Gas & Manufacturing Co., now boring for gas, will sink a second well.

**Corydon—Natural Gas.**—Pliny Parker has contracted to sink a natural gas well on the farm of Robert Gibson, near Corydon, for the Trenton Rock Gas & Mining Co., of Louisville.

**Georgetown—Laundry.**—Charles E. Shey & Co. will start a steam laundry.

**Hopkinsville—Water Works.**—Contract for the water works previously reported has been awarded to A. H. Kennedy, of Rockport, Ind.

**Glasgow—Oil Refinery.**—The Kentucky Southern Oil & Gas Co., of Louisville, have offered to erect an oil refinery with a capacity of 1,000 barrels per week if the citizens subscribe for \$18,000 of their bonds, donate a site 600x400 feet, and give certain privileges. The oil company write us that they will erect a refinery for illuminating oils within the next 90 days.\*

**Hickman.**—A Natchez, Miss., company offers to erect water works to cost \$30,000 and furnish the town with water at \$1,200 a year if given the contract.

**Louisville—Lithographing.**—The Falls City Lithograph Co. will put in additional machinery.

**Lexington—Electric Railway.**—The Lexington City Railway Co. will petition the next legislature to amend their charter, allowing the use of electricity as a motive power.

**Lexington—Publishing.**—C. C. Moore contemplates republishing the Blue Grass Blade.

**Middlesborough—Miscellaneous.**—Inquiries from the following points respecting establishing large works at Middlesborough have been received by the American Association (Limited), office, Knoxville, Tenn., the projectors of Middlesborough: From Western Pennsylvania, factories for making wagon hardware, bolts and nuts, steel rails and county bridges, car wheels and railroad cars; from Eastern Ohio, works for steel wire billets, stoves and cast-iron pipe; from Northern Ohio, works for axles and forgings; from Chicago, transfer of nail works; from New York, plant of two furnaces for making foundry iron; from Eastern Pennsylvania, coal leases.

**Nicholasville—Compress Factory.**—The name of the company previously reported as organized by F. F. Catlin, J. M. Hadley and others to establish a factory for the manufacture of a hemp, cotton, straw and hay compress, is the Tebow Press Co.

**Owensboro—Railroad.**—The Vincennes, Oakland City & Owensboro Railroad Co., mentioned in last issue as wanting new bids for the construction of their road, will probably award the contract to S. M. Deane.

**Owensboro.**—The Pioneer Mineral & Gas Co. previously reported, will contract for the sinking of a gas well.

**Paducah—Grain Elevators.**—Capitalists have been investigating with a view to erecting grain elevators in Paducah.

**Paducah.**—Col. Cooley is developing an ochre mine.

**Paducah—Paint Factory.**—The Mineral Paint Co., previously reported, will shortly let contract for their factory building. It is to be two stories, 25x40 feet.

**Russellville—Flour Mill.**—Carroll & Barclay, lately reported as to build a 150-barrel flour mill, have let contract to Edward Corbett & Co., of Washington, D. C.

**Union City—Water Works, &c.**—A Natchez, Miss., company has offered to build water works, sewerage system and furnish 20 arc electric lights to cost about \$200,000,

if given a contract for a number of years at \$5,000 per year.

**Winchester—Ice Factory.**—Hall & Co., of Nashville, Tenn., have purchased machinery and will erect an ice factory.

#### LOUISIANA.

**Alexandria—Ice Factory.**—S. Cullen, lately reported as having purchased the ice factory at Alexandria, will enlarge or put in larger machine next season.

**Colfax—Cotton-seed Oil Mill.**—C. H. Teal contemplates establishing a cotton-seed oil mill.\*

**New Orleans—Oil Mill.**—The Protection Oil Co., Limited, has been incorporated by Charles B. Pettit, P. J. McMyler, J. W. Gurley, Jr., and others for the manufacture and refining of petroleum and petroleum products; also the manufacture of tanks, cans, barrels, oil cars, etc. The capital stock is \$50,000.

**Ramsay—Sugar Mill.**—M. & T. Bagley, previously reported as improving their sugar-house, have purchased a sugar mill.

#### MARYLAND.

**Baltimore—Patent Stoppers.**—The Bottle Seal Co. have purchased the large factory built by the Baxter Electric Motor Co. and are putting in new machinery.

**Baltimore.**—The Monumental Coupling Co. has been incorporated by Joseph I. Heusler, John A. Robb, James Young and others for the manufacture of A. W. Rankin's patent pipe coupling. The capital stock authorized is \$1,500,000.

**Baltimore.**—The Strontia Mineral Springs have been sold to a stock company with O. P. Macgill, president, and Edward B. Bruce, general manager, who will improve and develop the property. The capital stock is \$300,000.

**Barton.**—The American Coal Co. have resumed operations in the Caledonia mines after building a new wheelhouse, blacksmith shop, plane, etc.

**Frederick.**—B. Ebert & Sons are erecting a carriage repository.

**Oakland—Quarry.**—A quarry of red building stone has been discovered and will be developed.

**Oakland.**—W. W. Fitzgerald will develop a mineral spring on his property near Oakland.

**Washington, D. C.**—Electric-light Plant. The Electric Light & Power Co. have received the contract, lately mentioned, of lighting part of the city with incandescent lights. They will erect a plant.

**Washington, D. C.**—Cable Road.—The Washington & Georgetown Railroad Co. will shortly commence the changing of their street railway to a cable road, as previously reported.

**Washington, D. C.**—The Washington & Tennytown Railroad Co., previously reported as to operate their road by electricity, have, it is said, purchased a site for their power house.

#### MISSISSIPPI.

**Enterprise—Hosiery Factory.**—The Stone-wall Manufacturing Co., previously reported as putting new machinery in their cotton mill, will manufacture hosiery.

**Greenville.**—The Delta Insurance Co. has been organized with C. M. Williams, president; H. T. Ireys, vice-president, and M. J. Welborn, secretary.

**Logtown—Saw Mill.**—Henry Weston is putting additional machinery in his saw mill.

**Meridian—Bridges.**—W. H. Curtis will receive proposals until September 2 for rebuilding the bridges over Bucktuna creek, Guans creek and Nannobie creek.

**Meridian—Publishing.**—J. S. Evans, Jr., will publish the "Call."

**Natchez—Furniture Factory.**—August Boehnke, of Brookhaven, contemplates moving his furniture factory to Natchez.

**Port Gibson—Cotton Mill.**—V. & A. Meyer & Co., of New Orleans, La., have

purchased the Port Gibson Cotton Mills for \$5,000, subject to a mortgage for \$20,000. They intend organizing a new company to operate the mill.

**Vicksburg—Manufacturing.**—Henry L. Blake, Eugene Martin, John D. Gilland and Thomas M. Smedes have incorporated the Phoenix Manufacturing Co. to build and operate mills, factories, railroads and vessels. The capital stock is \$60,000.

**Vicksburg—Electric-light Plant.**—The Hill City Electric-light Co. have commenced the erection of the incandescent electric-light plant previously reported.

#### NORTH CAROLINA.

**Asheville—Street Railway.**—The Asheville Fast Line & Suburban Street Railway Co. will build an electric railway, but have not as yet decided when they will commence work.

**Charlotte—Electric-light Plant.**—The Charlotte Gas Light Co. have, it is reported, let contract for their electric-light plant previously mentioned.

**Gap Creek—Iron Mine.**—R. Eames, Jr., is reopening the Gap Creek iron mine.

**Lexington—Wood and Iron Working Shops.**—C. M. Thompson has commenced the erection of a sash, door and blind factory 45x100 feet, a machine shop 30x50 feet, a foundry 30x50 feet, a dryhouse and an engine and boiler house.

**Lexington—Grist Mill.**—M. K. Gray is erecting a grist mill on his farm near Lexington.

**Lexington—Corn Mill.**—Grimes Bros., lately reported as improving flour mill, will also soon put in roller machinery to make 500 bus. corn meal daily.

**Lexington—Soap Factory.**—H. J. Berrier contemplates starting a small soap factory.\*

**Milton—Mica Mine.**—F. N. M. Search, of Philadelphia, Pa., has leased the mica mine on the property of William Irvine under the condition that he shall begin work within 90 days.

**Monroe—Railroad.**—Contracts for grading the Georgia, Carolina & Northern Railroad to the Savannah river will be let shortly, it is reported.

**Mt. Airy—Spoke and Handle Factory.**—H. W. Reed contemplates moving his spoke and handle factory from Dalton to Mt. Airy.

**Murphy—Sash and Door Factory.**—Gilbert Brandreth will establish a sash and door factory.

**Murphy—Saw Mill.**—Paddock, Lane & Co. will build a lumber mill.

**New Berne.**—The Farmers' Transportation Co. has been incorporated by D. L. Roberts, L. H. Cutler and others for transportation purposes. The capital stock is \$11,600.

**Oxford.**—R. V. Smith will erect a prize tobacco warehouse.

**Oxford.**—T. D. Clement contemplates changing his storage warehouse to prize tobacco warehouse.

**Oxford.**—W. C. Reed has purchased a prize tobacco warehouse and will put in steam fixtures and operate.

**Wantauga County—Iron Mine.**—R. F. Hoke is opening the Bullfinch Iron Mine near Cook's Gap.

**Walnut Cove.**—A company has been organized to test the Dan river field for coal, gas and oil.

**Wilmington—Woodenware Factory.**—The Industrial Manufacturing Co. have purchased the Clarendon Iron Works for \$7,100, and will, it is stated, put in machinery for the manufacture of baskets and woodenware.

**Wilmington.**—The Carolina Insurance Co. has been organized with G. W. Williams, president; D. L. Gorge, vice-president, and M. S. Willard, secretary.

**Wilmington—Rolling Mill.**—The Chamber of Industry is corresponding with parties who contemplate building an iron roll-



ing mill, and not a roller flour mill as reported.

#### SOUTH CAROLINA.

Camden—Cotton Mill.—The capital stock of the company previously reported as being organized to build a cotton mill is to be \$100,000. H. G. Carrison can give information.

Charleston—Bag Factory.—The Royal Bag Manufacturing Co. are putting in the new machinery previously reported, doubling their capacity.

Columbia—Oil Refinery.—H. H. Newton, of Bennettsville; D. A. Tompkins, of Charlotte, N. C.; R. E. Hill, of Abbeville, and others, have chartered the Union Refining Co. with a capital stock of \$30,000 to establish the oil refinery previously reported. A committee is investigating the advantages of Charleston and Columbia for the location of the refinery.

Gaffney City—Cotton Mill.—A stock company is being organized to build a cotton mill. \$43,000 has been subscribed, it is stated.

Georgetown—Jetty Work.—D. V. Howell has contract for work on the jetties and is making arrangements to secure scows, derricks, &c.

Georgetown—Ice Factory.—H. N. Morris, of Cincinnati, Ohio, is endeavoring to organize a stock company to start an ice factory.

Mullen—Grist Mill and Gin.—W. H. Daniels will erect a grist mill and cotton gin.

Pregnalls—Railroad.—The Walterboro & Yemassee Railroad Co. will be organized, it is reported, to build a railroad to Walterborough. R. C. Baker, of Eutawville, can probably give information.

Richburg—Cotton Mill.—The Fishing Creek Manufacturing Co. will substitute new and improved machinery and purchase additional spindles for their cotton mill.

Summerton—Oil Mill.—Thomas Wilson is president, and S. R. Cole, secretary, of the Summerton Cotton-seed Oil & Manufacturing Co., previously reported as organized with a capital stock of \$20,000 to erect a cotton-seed oil mill. Work has commenced on the mill.

Union—Water Works.—Propositions for establishing water works are wanted. W. T. Graham can give particulars.

#### TENNESSEE.

Brownsville—Compress.—The foundation is being laid for the compress previously reported to be built. E. C. Bush is superintendent.

Chattanooga—Factories.—It is reported that two factories will be located at Summit City, a suburb of Chattanooga. J. A. Williams can give particulars.

Chattanooga—Basket Factory.—The Chattanooga Basket & Package Co. are enlarging their factory, erecting an addition, two stories, 180x60 feet.

Chattanooga—Coal Mining and Dummy Line.—J. B. Goode, of Dallas, Texas, previously reported as having purchased 19,000 acres of coal land near Chattanooga for development, writes that he will open 10 mines, build dummy line, &c., and will require about \$200,000 of machinery, rails, &c.

Chattanooga—Machine Works.—The Buss Machine Works, of Grand Rapids, Mich., have established a branch store, and not a branch factory, as lately reported.

Chattanooga.—J. B. Pound, W. M. Bear-den, F. H. Bayley and others have chartered the Chattanooga Novelty Works for the manufacture of a patent flour receptacle. The capital stock will be \$50,000.

Chattanooga—Paint Works.—The Chattanooga Paint Co. are erecting an addition 45x50 feet to their works.

Cowan—Railroad.—The Tennessee Coal, Iron & Railroad Co. are building a railroad from their furnace to a rock quarry.

Fayetteville—Railroad.—Work is to be

commenced at once on the Cincinnati, Alabama & Atlantic Railroad, previously reported.

Franklin—Electric-light Plant.—The board of aldermen, lately reported as investigating with a view to erecting an electric-light plant, have decided to light the town by electricity. A committee has been appointed to make contracts.

Iron City.—A chalybeate spring has been discovered and will be improved.

Iron City—Gas and Oil Wells.—H. P. Seay is organizing the company previously reported to bore for natural gas and oil.

Jellico—Coal Mine.—The Williamsburg & Jellico Coal Co. have opened a vein of bituminous coal 57 inches thick.

Jonesboro.—It is reported that an English company has purchased the Embreeville iron property, embracing an old furnace and 50,000 acres of farming, mineral and timber land.

Knoxville.—W. J. Savage & Co., lately mentioned as to establish a machine shop, have organized the Knoxville Mill Supply & Machine Co.

Knoxville—Spoke Factory.—The Coffey Spoke & Felloe Co., of Burnside, Ky. are considering the moving of their spoke and felloe factory, employing 30 hands, to Knoxville.

Knoxville—Candy Factory.—Littlefield & Steere, of Jacksonville, Fla., will establish a candy factory.

Knoxville—Electric Railway.—The Fountain Head Railway Co. have been granted right of way to build an electric or horse car line.

Knoxville—Electric Railway.—The Knoxville Street Railway Co. have been granted right of way to erect poles and string wires for the operation of their street railway by electricity.

Memphis—Box Factory and Saw Mill.—The Anderson-Tully Co., of Detroit, Mich., have purchased 9½ acres of land on Big creek, and will erect a box factory and saw mill.

Memphis—Iron Works.—The Chicasaw Iron Works have recently erected new works at a cost of \$35,000.

Morristown—Dummy Line.—It is rumored that the Tate Springs property has been purchased by Atlanta, Ga., capitalists, who will build a dummy line from Morristown to Tate Springs, 12 miles.

Nashville—Electric Railway.—The Main Street & Lischey Avenue Street Railway Co. and the Nashville & Edgefield Street Railway, previously reported as to change to electric roads, will consolidate.

Nashville—Coffer-dam.—Holmes & Wilk, mentioned last week as likely to secure contract at \$10,810 for building coffer-dam at lock No. 1, in Cumberland river, have received contract.

Nashville—Planing Mill.—The Edgefield & Nashville Manufacturing Co. are enlarging their planing mill.

Nashville—Railroad.—J. T. Rhea, Lewis T. Baxter, John G. Houston, E. C. Lewis and others have applied for a charter for the Nashville Northern Railroad Co. to build a railroad.

Nashville—Cracker Factory.—A. E. Heighway has purchased the property of the Grubbs Cracker Co.

Otto—Saw Mill.—Chilton & Mathney have started a saw mill and wood-working factory.

Tennessee—Railroad.—Kilpatrick & Co., of Bridgeport, Ala., will build a narrow-gauge railroad to Dovan's cove, 12 miles.

Tallahoma—Railroad.—Work will soon begin on the Cincinnati, Alabama & Atlantic Railroad, lately mentioned.

#### TEXAS.

Austin—Artesian Well.—Machinery has been ordered for boring the eight-inch artesian well previously reported.

Austin—Straw Paper Mill.—Jacob Stern contemplates starting a straw paper mill.\*

Austin.—The contract for constructing the viaduct over the tracks of the Missouri, Kansas & Texas Railroad, mentioned in last issue, has been awarded to Wood & Bradburn. The cost will be about \$24,000.

Baird—Elevator.—The erection of a grain elevator is projected.

Beaumont—Boiler Works.—Mayor & Flagole, of Bay City, Mich., offer to move their boiler works to Beaumont if given inducements.

Beaumont—Factory.—A party has offered to erect a large factory if given a bonus.

Beaumont.—V. Weiss and others are organizing a board of trade.

Bonham.—The Commissioners' Court has been petitioned to issue bonds to the amount of \$25,000 for the improvement of the county roads.

Brady—Railroad.—The Fort Worth & Rio Grande Railroad (office, Fort Worth) will probably be extended to Brady.

Brownsville.—The city has issued \$15,000 of improvement bonds.

Bryan—Water Works.—The time for receiving bids for building the water works previously reported has been extended to September 10. Address H. B. Carr.

Cisco—Broom Factory.—W. W. Noel has started a broom factory.

Clarendon—Stone Quarry.—A building stone quarry has been recently opened near Clarendon.

Cleburne—Machine Shops.—A \$25,000 stock company has been organized, it is reported, to build machine shops.

Cuero—Water Works.—H. F. Hill, mayor, will receive proposals until September 15 for the construction of the water works lately reported.

Dallas—Bridge.—Contract has been let for the building of another bridge across the Trinity river.

Dallas—Flour Mill.—The Todd Milling Co., previously reported as incorporated to operate the Todd Flour Mills, have increased their capital stock from \$100,000 to \$200,000.

Dallas—Publishing.—The Promoters Co. has been incorporated by Henry Exall, W. Koppel and others to publish the Texas Guide. The capital stock is \$5,000.

Del Rio—Ochre Mining.—James Friedlander and S. H. Berton, representing Chicago and Galveston capitalists, have purchased ochre lands and ordered machinery for developing.

Denison—Sewerage System.—The city secretary will receive bids for constructing the sewerage system mentioned in last issue.

El Paso—Car Shops.—The Galveston, Harrisburg & San Antonio Railway Co. (office, Houston) are putting new machinery in their car shops.

Fort Worth—Stove Works.—M. A. McLaughlin has let contract for the erection of the buildings for the stove works mentioned in last issue.\*

Gainesville—Bridges.—Contract has been let for the building of two iron bridges to cost \$3,699, one across Elm and the other across Clear creek.

Galveston—Wharves.—The Galveston Wharf Co. are enlarging and improving their wharves.

Galveston—Artesian Well.—The Galveston Artesian Well Co., previously reported, have sunk an artesian well having an estimated flow of 500,000 gallons daily.

Galveston—Gas Works.—The Galveston Gas Co. contemplate putting in a plant costing about \$100,000 for the manufacture of water gas.

Georgetown—Chair Factory.—The First Texas Furniture Co. contemplate enlarging their chair factory.

Gordon—Ginnery.—J. Able & Co., previously reported as erecting a roller flour mill, are also erecting a cotton ginnery.

Houston—Artesian Well.—G. Warnecke has contract for sinking the artesian well for the Houston Water Works Co. mentioned in last issue.

Houston—Publishing.—Frank P. Cravens will publish a weekly paper to be called Town Topics.

Houston—Watch Factory.—Sweeney, Coombs & Fredericks are organizing a \$100,000 stock company to establish a watch factory.

Houston—Saw Mills.—M. Butler, previously reported as receiving contract to pave certain streets with bois d'arc block, will erect a number of saw mills.

Houston—Barrel Factory.—The Houston Barrel & Cistern Co., previously reported as chartered to manufacture barrels and cisterns, are receiving and erecting their machinery.

Houston—Soap Factory.—C. Bender and C. S. Benedict, previously reported as to establish a soap factory, have, with W. G. Halsey, of Galveston, M. B. Richardson and others incorporated the Texas Star & Soap Co., capital \$20,000, for the manufacture of soap.

Houston—Electric Railway.—The Houston Belt & Magnolia Park Railway Co. have started preliminary work on their electrical railroad lately mentioned.

Jefferson—Bridge.—W. F. Jones will receive proposals until August 27 for the construction of an iron cable or wooden bridge across Big Cypress bayou.

Jefferson—Woolen Mill.—Herbert Rives and S. B. Webster, previously reported as contemplating organizing a stock company to enlarge and operate their woolen mill, have, with J. H. Bemis and W. B. Atkins, incorporated the Jefferson Woolen Mills Co., capital stock \$25,000.

Laredo.—An iron bridge 345 feet long will be built. Bids are invited to September 17 by J. M. Rodriguez, county judge.

Lovelady—Saw and Grist Mill.—C. B. Moon and J. B. McNeill will build the saw and grist mill previously mentioned.

Marshall—Rolling Mill.—Eastern capitalists have offered to erect the rolling mill lately mentioned at a cost of \$150,000 if donated 20 acres of land and \$15,000. The proposition will probably be accepted.

Putnam—Gin and Grist Mill.—A gin and grist mill are being built. J. M. Toy can give particulars.

Mexia—Oil Mill.—A Memphis, Tenn., party contemplates erecting a cotton-seed oil mill.

Moscow—Dry-kiln and Planing Mill.—T. L. Hackney, reported in last issue as erecting a saw mill near Moscow is also building a dry-kiln and planing mill.

Randolph—Saw Mill and Gin.—T. J. Aikin is erecting a saw mill and cotton ginnery.

Sherman—Medicine Factory.—The N. C. Simmons, Jr., Medicine Co., of Grayson county, has been incorporated by N. Caud, J. J. Simmons, of Dallas, N. M. Lee and others with a capital stock of \$10,000.

Taylor—Artesian Well.—The Artesian Well Co. will probably contract with Fowler & McGulvrey, of Waco, for the sinking of their artesian well previously reported.

Terrell—Hardware Factory.—The Gaffney Hardware Co. has been incorporated by Eli Gaffney and others for the manufacture of hardware.

Tyler—Railroad.—R. B. Hubbard, J. B. Douglas, C. T. Bonner, A. L. Clark and others have incorporated the Alexandria, Tyler & Northwestern Railway Co. to build a railroad from a point on the Sabine river in Sabine county to a point on the Fort Worth & Denver Railway in Wise county.

Tyler—Wagon Factory.—The erection of a wagon factory is being agitated.

Victoria—Ice Factory.—An ice factory will be built in connection with the electric plant previously reported.



## VIRGINIA.

Alexandria—Electric-light Plant.—The Schuyler Electric Co. previously reported as receiving contract to erect an electric-light plant for the city, are erecting the machinery.

Alexandria.—The Blue Ridge Park Association has been chartered with J. W. Douglass, of Washington, D. C., president; S. M. Allen, of Boston, Mass., vice-president, and John Bowles, secretary. The authorized capital stock is \$5,000,000.

Alexandria—Electric.—The Richter Electric Construction Co. has been incorporated with Charles Richter, of Camden, N. J., president; H. L. White, of Somerville, Mass., treasurer, and A. G. Gray, of Brooklyn, N. Y., secretary. The capital stock authorized is \$1,000,000.

Buena Vista—Tannery.—Appold Bros. are repairing their tannery.

Danville—Electric Railway.—The Danville Electric Railway Co. will improve and probably extend their line.

Fincastle—Iron.—W. B. Bean and J. D. Ryals will develop the Big Hill iron mines.

Luray—Manganese Mine.—Broadus & Newman will develop a manganese mine.

Lynchburg—Pipe Works.—The Glamorgan Co. write that the rumor that they contemplated building pipe works at West Lynchburg was wrong.

Newport News.—The Newport News Light & Water Co. has been chartered with C. B. Orcutt, president, and Edward St. John, secretary. The capital stock is to be not less than \$30,000 nor more than \$150,000.

Norfolk—Barrel Factory.—The Standard Truck Barrel Co. has been incorporated at Salisbury, Md., with E. E. Jackson, president; J. J. Morris, vice-president, and Thomas Perry, secretary, to establish a barrel factory in Norfolk.

Petersburg—Tobacco Factory.—David Dunlop is enlarging his tobacco factory.

Radford.—Sturdevan & French, previously reported as to establish planing mill and sash factory, will also start brick-yard.\*

Radford—Grading.—The Radford Land & Improvement Co. and the West Radford Land Co. have let contract for grading their properties.

Radford—Railroad.—George T. Mills has contract to build the 2-mile belt railroad for the Norfolk & Western Railroad Co. (office, Roanoke), previously reported.

Radford—Pipe Works.—A site has been selected for the pipe works previously reported. They are to have a daily capacity of 40 tons, and employ about 250 hands. The Radford Land & Improvement Co. can give particulars.

Roanoke—Electric-light Plant.—The Roanoke Electric Light & Power Co. will probably enlarge their plant.

Roanoke—Bucket Factory.—It is reported that a bucket factory will be established.

Roanoke—Chemical Works.—The Virginia Dare Chemical Co. has been organized by L. H. Cocke, C. R. Wertz, S. M. Dawson and others for the manufacture of chemicals. The capital stock is to be not less than \$5,000 nor more than \$50,000.

Roanoke—Publishing.—Mr. Bibb has commenced the publication of the Gazette.

Roanoke—Wagon Factory.—P. S. Wise, of New Market, Va., is prospecting with a view to moving his wagon factory to Roanoke.

Rockbridge County—Furnace.—A small smelting furnace is being erected at the tin mines to test the ore.

Staunton—Coal Mine.—Harry Wegner and Thomas Whelan are developing anthracite coal at the foot of Crawford mountain, 15 miles northwest of Staunton.

Staunton—Railroad.—The Staunton & West Augusta Railroad Co., reported in last issue, have let contract for 25 miles of road to the Keating Railroad Co., of Read-

ing, Pa. R. N. Pool, of Staunton, can give particulars.

Virginia.—A mining company has been organized with James C. Hawk, of Kansas City, Mo., president; J. P. Woodhouse, of same place, vice-president, and W. S. Turner, of Elkton, Pa., secretary, to develop tin and other minerals. They have a tract of 10,000 acres and a capital stock of \$2,000,000.

Wise C. H.—New Town.—A new town to be called St. Paul is being built near Wise C. H.

## WEST VIRGINIA.

Alaska—Bridge.—An iron bridge will probably be built across Patterson's creek.

Benwood—Pipe Line and Refinery.—The Standard Oil Co. are erecting a large oil refinery, and will construct a pipe line from the Nineveh oil field in Greene county, Pa., to Benwood.

Bramwell C. H.—Knitting Factory.—The erection of a knitting factory is talked of.

Independence—Furnace.—The capacity of the Irondale furnace, F. Nemejyer, proprietor, after the improvements previously reported are completed, will be increased from 28 to 50 tons daily.

Lewisburg—Cold Storage.—The Greenbrier Creamery Co. will add cold storage.\*

Morgantown—Tank Factory.—Thomas McDermott will move his tank factory from Waynesburg to Morgantown.

Morgantown.—A Philadelphia company is preparing to sink an oil well on the farm of Eli White.

Piedmont—Machine Shops.—It is rumored that the West Virginia Central & Pittsburgh Railroad Co. will purchase Hendrickson's island, on which to erect machine shops.

Putnam County—Oil Wells.—Two oil wells are being sunk.

Shanghai—Artesian Well.—Mr. Stoner has sunk an artesian well near Shanghai having a flow of 1,200 gallons per hour. The water will probably be piped to Shanghai.

St. Albans—Railroad.—The company who will build the railroad from St. Albans to the Forks of Coal have asked for a subscription of \$23,000 from Jefferson and Washington districts. The town of St. Albans will vote September 7 on subscribing \$7,000.

Wheeling—Crematory.—The city council has been requested to appropriate \$6,000 for the erection of a new crematory.

Wheeling—Nail Works.—It is reported that the puddling department of the Belmont Nail Co. will commence work shortly.

## BURNED.

Bostwick, Fla.—The saw mills of Webster & Davis, near Bostwick.

Menlo, Ga.—The saw and planing mill of T. F. Batten.

New Cumberland, W. Va.—The Union Fire-brick Works; loss \$10,000.

Norfolk, Va.—The Norfolk Cotton & Knitting Factory; loss on machinery about \$5,000.

Saratoga, Ark.—The steam mill of Mr. Grounds damaged by a boiler explosion.

THE Austin (Texas) Statesman recently appeared in a new and attractive dress. No State in the Union displays more energy and thoroughness in its newspaper work than Texas, and the Statesman is among the most energetic and thorough of these papers. In no way can we more clearly express our opinion of the Texas press, than to say that it has practically made the State what it is. A city represented by such a live paper as the Statesman now is, cannot know any word but "forward."

## Building Notes.

Athens, Ala.—The Limestone County Farmers' Warehouse Co. has been chartered to build a warehouse. The capital stock is \$10,000.

Atlanta, Ga.—A. P. Woodward, R. J. Griffin, W. W. Haskell and others have incorporated a building and loan association to be known as the Penn Loan Relief Society.

Attalla, Ala.—Samuel Dillard and J. S. Stewart will erect a three-story brick building, 125x50 feet, on Fifth avenue.

Augusta, Ga.—The Augusta Orphan Asylum, reported in last issue as burned, will be rebuilt at once. It was a five-story structure, and cost \$138,635.

Baltimore, Md.—The report that W. C. Frederick had prepared plans for a \$10,000 hotel is premature.

Baltimore, Md.—George Bunnecke has contract for the erection of the library building for the Johns Hopkins University. It is to be two stories, 40x90 feet, and to cost \$20,000. W. A. & J. T. Wilson prepared plans.

Baltimore, Md.—A new edifice is being erected for the South Baltimore Methodist Protestant Church.

Baltimore, Md.—Mrs. M. Forbes will erect a four-story dwelling, 25x100 feet, to cost \$20,000—A. A. Reinhart is the architect; the Hungaria Society, a building two stories, 45x80 feet, to cost \$15,000; F. D. Morrison, a residence two stories, 50x60 feet, to cost \$15,000; the Abell estate will improve one of their buildings on Fayette street at a cost of \$6,000; Charles Willms has plans for the remodeling of a building on Howard street at a cost of \$10,000.

Baltimore, Md.—A site has been purchased for the new building for English-German school, No. 5, previously reported. The amount appropriated is \$25,000.

Baltimore, Md.—Grammar school No. 8, for the erection of which bids will be received by J. T. Oster until August 27, as reported in last issue, will be two stories, 55x119 feet, and have the Smead process of heating and ventilation. The appropriation is \$21,000.

Baltimore, Md.—F. T. Gallagher has received the contract to build primary school No. 13, lately mentioned. The cost will be about \$21,000.

Bartow, Fla.—Hotel.—A stock company is being organized to build a hotel.

Birmingham, Ala.—Figh & Williams, lately mentioned, have received contract to erect the new Paul Hayne school building.

Birmingham, Ala.—B. Gilreath will erect a three-story brick store to cost \$15,000 and a three-story brick store to cost \$10,000, both on Third avenue, and the Gilreath Construction Co., a \$15,000 brick store on First avenue; Swem & Thomas are erecting a three-story brick building on Eighteenth street.

Brunswick, Ga.—The Brunswick & Western Railroad Co. have built an extension to their wharves.

Brunswick, Ga.—Coney & Parker contemplate building an extension to their wharves.

Chalybeate Springs, Ga.—Hotel.—Mr. Grant has purchased the Chalybeate Springs property, and will rebuild and improve the property at a cost of \$50,000.

Charleston, S. C.—The trustees of the Roper Hospital have let contract for the repairs to that building, lately mentioned, to Mr. Jenkins for \$6,000. Simons & Huger are the architects.

Chattanooga, Tenn.—S. W. Divine will build a \$10,000 brick residence; Rev. T. H. McCallie, a \$10,000 brick residence, and T. H. Payne, a \$6,000 frame residence. W. H. Floyd is the architect.

Chattanooga, Tenn.—Hotel.—A \$100,000 stock company has been organized, it is reported, to build a hotel on Mission Ridge.

Chattanooga, Tenn.—A normal school will probably be built at Summit City, a suburb of Chattanooga.

Chibley, Fla.—Hotel.—A stock company is being organized to build a hotel.

Cisco, Texas.—Depot.—The Texas & Pacific Railroad Co. (office, Dallas), and the Houston & Texas Central Railroad Co. (office, Houston), will probably rebuild the union depot.

Columbia, Ala.—A branch of the Interstate Building & Loan Association will be organized.

Columbus, Ga.—Hotel.—A stock company will probably be organized to build a hotel.

Covington, Ky.—Contract for the new market-house previously reported will be let shortly.

Dayton, Tenn.—A branch of the American Building, Loan & Investment Association has been organized.

De Land, Fla.—The report that Robert H. Coleman, of Cornwall, Pa., would build a \$100,000 residence is said by Mr. Coleman to be an error.

Eastman, Ga.—A branch of the Interstate Building & Loan Association has been organized.

Fairmont, W. Va.—U. A. Clayton & Co. have the contract for the erection of the 50 houses previously reported at Brierton for the Upper Monongahela Coal & Coke Co.

Fernandina, Fla.—A branch of the American Building & Loan Association has been organized with W. A. Mahoney, president, and R. C. Cooley, secretary.

Florence, Ala.—Dr. J. M. Garlington and W. P. Campbell have commenced the erection of a business block on Tennessee street.

Florence, Ala.—A branch of the American Building, Loan & Tontine Savings Association has been organized with George P. Jones, president; R. L. Bliss, vice-president, and A. L. Ellett, secretary.

Fort Payne, Ala.—A. E. Dickinson, of Holyoke, Mass., will erect a brick block, two stories high. Smith & Spencer have the contract.

Fort Smith, Ark.—A branch of the American Building & Loan Association has been organized with J. W. Bocage, president, and R. H. M. Mills, secretary.

Gainesville, Ga.—Gandler & Williams will erect a business house.

Georgetown, Ky.—The Baptist church will be remodeled at a cost of \$5,000.

Georgetown, Ky.—A branch of the Southern Building & Loan Association has been organized with W. C. Owens, president, and Warren Clayton, secretary.

Gold Hill, Ala.—The New Hope Alliance have chartered a \$5,000 stock company to build a warehouse.

Greenville, Miss.—Hotel.—The St. Charles Hotel is being remodeled.

Guntersville, Ala.—A new church will be built for the Christian church. J. G. Winston, Jr., can give information.

Hagerstown, Md.—The Standard Oil Co. contemplate erecting a large storage warehouse.

Hillsboro, Tex.—The county commissioners have decided to build the new court-house previously reported. Judge Overton can give particulars.

Hot Springs, Ark.—Jos. Longinotti, of Texarkana, Ark., previously reported as to erect a \$40,000 building, will put in steam heater.

Jacksonville, Tex.—Depot.—The International & Great Northern Railroad Co. (office Palestine) will rebuild their depot recently burned.

Jellico, Tenn.—The Citizens' Bank will erect bank building to cost about \$10,000.

Knoxville, Tenn.—Hotel.—The Knoxville Hotel Co. have purchased a site, 200x300 feet, corner Main and Gay streets, for \$40,000, for their hotel previously reported.



Knoxville, Tenn.—A company has been organized, it is reported, to improve suburban land and build houses.

Knoxville, Tenn.—F. Miller will build 3 three-story business houses on Prince street, and Scott & Dempster, a two-story warehouse 50x80 feet. Baumann Bros. are architects for both.

Knoxville, Tenn.—A new school building will be erected at West Knoxville.

Laredo, Texas.—Jas. Munhy, architect, wants bids on four two-story brick buildings and iron and plate-glass fronts.

Lonaconing, Md.—The school commissioners have let contract for the erection of a new school building to John Story at \$9 350.

Loudon, Tenn.—Hotel.—Baumann Bros., Knoxville, are preparing the plans for the three-story hotel reported in last issue as to be built by E. P. McQueen and others. It is to be 60x96 feet.

Louisville, Ky.—John H. Brand will build a residence to cost \$13,000.

Ludlow, Ky.—The Methodists have contracted for the erection of a new edifice to cost about \$6,000.

Macon, Ga.—The Macon Blind Asylum will be enlarged at a cost of \$15,000.

Marshall, Texas.—A party from Shreveport, La., offers to build a city hall, market-house and fire-engine house if donated a site and other privileges.

Mason, Texas.—W. E. Wheeler will erect a two-story stone hall and office building 50 x 100 feet.

Memphis, Tenn.—J. A. Bailey will erect a two-story dwelling on Lauderdale street to cost \$10,000. E. C. Jones is the architect.

Meridian, Miss.—A. J. Peck will erect a three story brick building 30x85 feet on Fifth street. G. M. Torgerson is the architect.

Memphis, Tenn.—R. F. Tate will build a \$10,000 residence. C. H. Maydwell is the architect.

Memphis, Tenn.—George Schmalzreed is erecting a four-story business house to cost \$35,000.

Meridian, Miss.—A. Threefoot & Sons will erect a three-story warehouse on Twenty-third street and a brick building 34x70 feet on Fifth street.

Meridian, Miss.—Mr. Ormond will erect a three-story brick building on Fourth street. A. W. Maas is architect, and Ratzburgh & Platt have the contract.

Monroe, N. C.—A church will be built by the Lutherans. Rev. J. F. Moser can give particulars.

Murphy, N. C.—Gilbert Brandreth is building 15 cottages.

Nashville, Tenn.—Hotel.—The Maxwell House is being improved at a cost of about \$25,000.

Nashville, Tenn.—The Home Building & Loan Association has been chartered by C. H. Sanders, P. G. Dismukes, L. T. Baxter and others.

Nashville, Tenn.—Hotel.—The Maxwell House is to be enlarged and improved at a cost of about \$30,000.

Oakland, Md.—Washington, D. C. capitalists have recently purchased the Porter farm and will establish a summer resort, building a hotel. J. M. Jarboe has contract for the hotel.

Ocala, Fla.—A new cotton warehouse is being built.

Orlando, Fla.—A new edifice will be built for St. Joseph's Catholic church.

Owensboro, Ky.—Hotel.—The company previously reported as purchasing the Tar Springs property and to build a hotel and cottages, is the Tar & White Sulphur Springs Co., capital \$100,000. They intend making extensive improvements.

Parkersburg, W. Va.—G. E. Smith has awarded a contract to erect a building on Market street to Hicks & Calderwood, of Charleston. The cost will be about \$30,000.

Pensacola, Fla.—E. M. Biedleman will build a brick warehouse 60x80 feet.

Pensacola, Fla.—The building previously reported as to be put up by the I. O. Odd Fellows will cost \$8,000 to \$10,000. Thos. C. Watson can give particulars.

Pine Bluff, Ark.—The Bank of Pine Bluff is remodeling a building to be used as a bank.

Pond Gap, Va.—Hotel.—Prof. R. N. Pool, of Staunton, and a company of Washington (D. C.) capitalists have purchased the Augusta White Sulphur Springs, and will build a hotel and improve the property.

Richmond, Va.—Herman Schmidt will erect a natatorium building 70x112 feet to cost \$8,000. C. Ruehrmund prepared plans.

Richmond, Va.—Bristow & Pearce have received contract at \$31,235 for building market-house.

Sheffield, Ala.—Hotel.—It is reported that a Northern party will purchase the Sheffield Hotel, now in course of erection, and complete it.

Sheffield, Ala.—Dr. A. G. Haywood has secured 22 acres of ground for his female college previously reported. The cost of the buildings is estimated at \$40,000.

Sheffield, Ala.—A New York capitalist has purchased 30 lots, it is reported, on which he will erect buildings.

Sheffield, Ala.—Dr. A. G. Haygood has let contract for the erection of a fine residence, and W. L. Chambers has let contract for his residence previously reported.

Shreveport, La.—Caddo parish has voted to issue the \$40,000 in bonds to build the new courthouse previously reported.

Springfield, N. C.—Hotel.—O. S. Crouch will enlarge his hotel.

Springfield, N. C.—The People's Deposit Bank are erecting a bank building.

Springfield, N. C.—A new church is being built for the Baptists.

Staunton, Va.—Hotel.—A stock company will be chartered with a capital stock of \$200,000 to build a hotel.

Suwanee Springs, Fla.—Hotels.—A stock company with Andrew Handley, of Savannah, president, have recently secured the Suwanee Springs property and erected two hotels and 20 cottages at a cost of \$75,000.

Thorp Springs, Tex.—The Christian church have decided to erect the Add Ran University at Thorp Springs. H. M. Bandy can give information.

Tuskaloosa, Ala.—W. W. Thompson has received contract for building city hall at \$20,000.

Uptonville, Ky.—A new church will be built by the Methodists.

Vernon, Texas.—Hotel.—The Texas Investment Co. will erect a brick hotel to cost \$20,000.

Vernon, Texas.—T. P. Lisman has commenced the erection of a brick building 60x120 feet; B. M. Logan, a brick building 60x110 feet, and the Texas Investment Co., a brick building 120x120 feet. M. Lasker will erect several brick buildings. Scurlock & Ralston; Johnson, Cook & Co., and Wood & Co. will each erect a brick building.

Villa Rica, Ga.—The Southern Cotton Oil Co. have erected a large seed warehouse.

Washington, D. C.—John C. Davidson will erect a brick dwelling on Q street to cost \$8,500; Charles Gessford, a \$5,000 brick dwelling on Massachusetts avenue, and Andrew McGarraghy, 10 dwellings on B street.

West Point, Va.—A schoolhouse to cost \$6,000 is to be built. A. L. West, of Richmond, is the architect.

Wichita Falls, Tex.—The commissioners' court has let contract for the construction of a new jail to cost \$10,000 to the Diebold Safe & Lock Co., of Canton, O.

Winchester, Ky.—Mrs. T. A. Taylor will erect a business house.

Yazoo City, Miss.—Hotel.—Mrs. Josie McLaurin will build a hotel.

Yazoo City, Miss.—Hotel.—The organization of a stock company to build a large hotel is talked of.

Yorkville, S. C.—The Yorkville Loan & Savings Bank are erecting a bank building.

### Activity in a North Carolina Town.

MURPHY, N. C., August 19, 1889.

*Editor Manufacturers' Record:*

Murphy is the county seat of Cherokee county, the extreme southwestern county of North Carolina, bordering on Tennessee and Georgia. It is 125 miles west of Asheville, N. C., 130 miles north of Atlanta, 90 miles east of Chattanooga, and 80 miles southeast of Knoxville, and situated in the very center of the richest and most varied mineral region of the South, with railroads being built to the town from each of the above-named places. One, the Marietta & North Georgia Railway, now completed, and the Western North Carolina Railroad, finished to a point 18 miles distant.

The mineral resources of this section are varied, and, as a whole, are, I believe, unequalled by any other on this continent. Here are found the richest corundum mines of the world, rich ores of various kinds, notable among which are gold, silver, mica and copper; iron of the finest quality in inexhaustible quantities; marble of most exquisite variety, from pure white, pale flesh color to coal black, variegated by seams and stripes of every color, and talc in large quantities, of great variety and exceeding beauty, many specimens being almost transparent.

Companies of Boston, New York, San Francisco, Cincinnati, Richmond, Nashville, Lynchburg, Baltimore, Washington, D. C., Charleston, S. C., Charlotte, Atlanta, Chattanooga, Knoxville and many other places are interested in these minerals, and are only waiting the completion of railroads to develop their properties.

The Nalta Consolidated Marble, Iron & Talc Company, whose property is located five miles south of Murphy, are opening the same in most approved manner, and will shortly erect suitable machinery for preparing their marble and talc for market.

The "No. 6" property, located one mile north of the town, recently sold to a Nashville, Tenn., syndicate for \$16,000, will at once be developed. This property is rich in iron, marble, gold and silver.

The Cherokee Iron & Marble Company, who own 1,500 acres of land three miles east of town, upon which there are rich deposits of gold, silver, marble and iron are making preparation for its development in the most approved and modern style.

Gilbert Brandreth, late of Sing Sing, N. Y., has recently located here and purchased considerable ground in the town, upon which he is building about fifteen modern cottages. He is also arranging to erect a saw, door and blind factory.

Paddock, Lane & Co. (Lieut. Gov. Woodbury, of Vermont, being the company) have within the past year bought large quantities of timber lands in this county, and Gov. Woodbury has recently visited here and found the purchases of his company so satisfactory that they have decided to immediately put in extensive mill machinery for the sawing of their lumber. The officers of this company are located at Murphy. The Presbyterians are making preparations to erect a handsome church of modern architectural design.

LESLIE E. CAMPBELL.

OIL REFINERY—LOUISVILLE, KY., August 19, 1889.—We propose erecting a refinery within the next ninety days for running illuminating oils. Will be in the market for refinery capacity 500 or 1,000 barrels per week. Will also need 7½ miles 2 inch line pipe, and pumps for same. Also three tank cars, capacity 120 to 130 barrels. Will pay cash.

KENTUCKY SOUTHERN OIL & GAS CO.

### Sheffield, Ala.

The excursion of seventy or eighty leading New England business men to Sheffield, Ala., as reported in the MANUFACTURERS' RECORD last week has already resulted in great good. It gave these people, many of whom had never been in Alabama, an opportunity to see for themselves the wonderful growth of Sheffield. In all the history of American development, there are few places that have, in so short a time, laid such a foundation for permanent growth and prosperity as Sheffield. Others have been able to show a larger population in the same number of years, but Sheffield has been building for the future. It has established gigantic industries, as a basis for a large and permanent population, and not simply sought with a great Oklahoma hurrah to draw big crowds without the opportunity of finding remunerative employment. Sheffield has built wisely and well; and this, added to the energy which its land company is displaying, gives assurance that its future growth will, in all probability, more than fully reach the highest expectations of its most enthusiastic friends.

In addition to the letters published elsewhere as to the location of the exposition of 1892, the MANUFACTURERS' RECORD has received, but too late for publication, letters from the following gentlemen: Hon. Barnes Compton, M. C. from Maryland, strongly advocating Washington; from the mayor of Huntsville, Ala., doing the same; mayor of Columbia, S. C., favoring New York for fear that Washington is too small; Hon. St. George Tucker, M. C. from Virginia, for Washington as combining all needed advantages; mayor of St. Sterling, Ky., for Washington; Gov. Fowle, of N. C., for Washington; mayor of Texarkana, Ark., for Chicago or St. Louis, and mayor of Roanoke, Va., who would prefer Washington but for its size, and thinks New York has more facilities for the exposition.

A FEW months ago Wilmington, N. C., organized a chamber of industry to aid in establishing new manufactures, and the success of the work of this organization may be judged from the following extract from a letter of Mr. J. M. Forshee the secretary to the MANUFACTURERS' RECORD:

"We are corresponding with parties with regard to locating the following industries: Two iron rolling mills, one decorating company for decorating china, glass and stoneware, one glass factory, one trunk factory, one bagging factory from cotton and one hay and cotton press works, one agricultural implement works, one silk mill, one engine and saw mill machinery works.

A PETROLEUM refinery, the first ever established south of Maryland to refine Southern oil, is to be built by the Kentucky Southern Oil & Gas Co., of Louisville, which has for some time been testing the oil fields of Kentucky.



## MACHINERY WANTED.

If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.

Boiler and Engine.—W. P. Dugan, Bells, Texas, wants engine and boiler for ginnery.

Boiler and Engine.—Arthur Coffin & Co., Bryson City, N. C., want 70 horse-power boiler and engine.

Boiler and Engine.—The Alliance Cotton-seed Oil Mills, Dalton, Ga., want good second-hand or new 50 horse-power boiler and 40 horse power engine.

Boiler and Engine.—A. E. Willard, Homosassa, Fla., may possibly want small engine and boiler for pumping, irrigating, &c.

Boiler and Engine.—W. S. Brooks, Milledgeville, Ga., wants 40 horse-power engine and 50 horse-power boiler.

Boiler and Engine.—Sturdevan & French, Radford, Va., want 25 or 30 horse-power stationary and 35 or 40 horse-power portable or locomotive boilers, good second-hand or new.

Boiler and Engine.—C. M. Thompson, Lexington, N. C., may want boiler and engine.

Brick Machinery.—Sturdevan & French, Radford, Va., want full outfit for brick-yard; second-hand will do.

Brick Machinery.—W. M. Howard, Lexington, G., will want brick machinery.

Brick Machinery.—The Climax Fire Brick & Tile Co., Texarkana, Ark., want steam wheels for making ware and also steam dryer.

Bridge Building.—J. M. Rodriguez, County Judge, Laredo, Texas, invites bids till Sept. 17 for building a 345-ft. iron bridge.

Cane Mill and Evaporator.—A. E. Willard, Homosassa, Fla., wants small evaporator and cane mill.

Cells.—The time for receiving proposals for the eight steel-clad cells and corridor at Gainesville, Ga., previously reported, has been extended to September 27. Address A. R. Smith, Gainesville, Ga.

Clay Machinery.—W. M. Inge, Corinth, Miss., wants price of plant (not including boiler and engine) for washing 25 to 50 tons of clay a day.

Cold Storage Plant.—The Greenbrier Creamery Co., Lewisburg, want bids for cold storage plant for building 30x40.

Complete Outfit for Stove Works.—The Fort Worth Stove & Foundry Co., Fort Worth, Texas, will want complete outfit for \$50,000 stove works.

Complete outfit for oil refinery is wanted by the Kentucky Southern Oil & Gas Co., Louisville, Ky. Capacity to be 500 to 1,000 brls. per week.

Corn Mill.—W. S. Brooks, Milledgeville, Ga., wants corn mill machinery, two sets rocks, &c.

Cotton-seed Oil Machinery.—The Alliance Cotton-seed Oil Mills, Dalton, Ga., want bids on cotton-seed oil machinery.

Cotton-seed Oil Machinery.—C. H. Teal, Colfax, La., wants estimates on full outfit for 10-ton cotton-seed oil mill.

Cotton-seed Oil Mill Machinery.—Guy C. Hamilton, Athens, Ga., wants to correspond with cotton-seed oil mill machinery manufacturers.

Electric Plant.—W. S. Brooks, Milledgeville, Ga., wants electric plant for oil mill.

Electric Plant.—R. J. Edenfield, Waynesboro, Ga., wants prices on electric plant, 50 or 60 incandescent lights, for small factory.

Ginnery.—W. P. Dugan, Bells, Texas, wants ginnery outfit complete.

Grist Mill.—W. H. Daniel, Mullins, S. C., will buy grist mill machinery after a while.

Grinding Machinery.—Thos. L. Badgett, Laurens C. H., S. C., wants a second-hand bone grinding machine.

Grading Machinery.—Holshouse & Schiltz, Clinton, S. C., want grading machinery such as scrapers, railroad plows, dump cars, track and rock tools.

Gymnasium and natatorium supplies are wanted by Tarver Waddell, Helena, Ark.

Heating.—S. L. Leary, architect, Charlotte, N. C., will want steam or hot water heaters for \$50,000 college at Raleigh.

Ice Machine.—The Bessemer Ice Manufacturing & Storage Co., Jas. H. Hard, manager, Bessemer, Ala., want to buy 10 or 15-ton ice machine.

Inclined Railway.—S. P. Withrow, care Russell House, Chattanooga, and others, previously reported as having incorporated the Mountain Short Line Incline Railway Co. to build an incline railway to top of Lookout mountain, will want full outfit of machinery.

Iron Pipe.—The Kentucky Southern Oil & Gas Co., Louisville, Ky., want 7½ miles of iron pipe.

Iron Rails.—Jas. F. Peters, Ironton, O., wants 150 tons 30-pound iron T rails.

Machines for Cutting Bar Iron.—The Medart Patent Pulley Co., of St. Louis, want "hand cutting-off machine for cutting round bar iron."

Metal Roofing.—The Alliance Cotton-seed Oil Mills, Dalton, Ga., want metal or other fire-proof roofing.

Locomotive and Cars.—Jas. F. Peters, Ironton, Ohio, wants a standard gauge locomotive and 30 to 40 flat cars.

Phosphate Machinery.—The Peruvian Phosphate Co., G. R. Boaz, president, will probably want phosphate machinery for new works.

Pumps and Tank Cars.—The Kentucky Southern Oil & Gas Co., Louisville, Ky., want pumps for oil refinery and piping oil and 3 tank cars.

Shafting.—The Alliance Cotton-seed Oil Mills, Dalton, Ga., want shafting.

Shafting and Pulleys.—Arthur Coffin & Co., Bryson City, N. C., want shafting, pulleys, &c.

Small Excursion Steamers.—W. H. Burgess, Chattanooga, Tenn., wants one or more excursion steamers to carry 30 to 50 passengers.

Soap Machinery.—H. J. Berrier, Box 20, Lexington, N. C., wants prices on small soap-making plant.

Straw Paper Mill.—Jacob Stern, Austin, Texas, wants machinery for straw paper mill to make two tons a day.

Steam Pipe.—Sturdevan & French want 150 feet 1½ or 2-in. steam pipe.

Water Works.—Bids for establishing water works at Union, S. C., are wanted. Address W. T. Graham.

Wood-working Machinery.—Jas. M. Benjamin, Charlottesville, Va., wants 40-inch bolting saw with power friction feed and bed planer, both second-hand.

Wood-working Machinery.—Sturdevan & French, Radford, Va., want a planer and a matcher.

Wood-working Machinery.—Whittle, Roehl & Co., 36 McGhee street, Knoxville, Tenn., want second-hand resaw.

INCLINE RAILWAY—CHATTANOOGA, TENN., August 19, 1889.—We expect to purchase the machinery to operate an incline plane on Lookout Mountain. Do not know just what we will want yet, since our plans and specifications have not yet been drawn up. Will know in September.

S. P. WITHROW.

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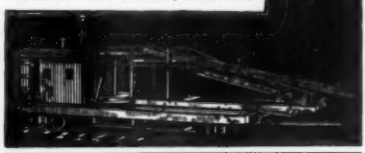
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## New Southern Banks.

Alvarado, Texas.—The Farmers' & Mechanics' National Bank is the name of the national bank previously reported as being organized with a capital stock of \$50,000. L. B. Randall is president.

Asheville, N. C.—The Bank of Asheville, previously reported as to be changed to a national bank, has been authorized to commence business with a capital stock of \$100,000.

Bastrop, Texas.—The capital stock of the First National Bank, previously reported as being organized to succeed the Bastrop County Bank, is \$50,000.

Brady, Texas.—The McCulloch County Bank has been organized with E. M. Longcope, president, and E. J. Marshall, vice-president.

Camden, Ark.—The project of organizing the Camden National Bank, previously reported, has been abandoned.

Charlotte, N. C.—O. P. Heath, of Lancaster, S. C., and Ben. Heath, of Monroe, will establish a bank with a capital of \$100,000.

Coleman, Texas.—McCord, Cameron & Co. have recently established a bank.

Collierville, Tenn.—Efforts are being made to organize a bank.

Dallas, Texas.—Arbuckle & Son have started a private bank.

Denison, Texas.—The State National Bank has been transferred to R. C. Sherman, of Bradford, Pa., and others.

Dyersburg, Tenn.—The Bank of Dyer County has been organized with S. R. Latta, president, and J. M. Nichols, vice-president.

Elkton, Md.—The name of the national bank previously reported as organized by W. M. Singerly, of Philadelphia, Pa., and others is the Second National Bank. W. T. Warburton is president, and W. M. Singerly, vice-president.

Farmerville, La.—A bank will be established, it is reported.

Frankfort, Ky.—The two banks previously reported as being organized have been authorized to commence business as the State National Bank, capital \$150,000, and the Frankfort National Bank, capital \$100,000.

Fort Gaines, Ga.—The bill previously reported as introduced in the legislature at Atlanta to incorporate the Bank of Fort Gaines has passed.

Goldthwaite, Texas.—D. H. Trent contemplates changing his private bank to a national bank.

Greenwood, S. C.—The Bank of Greenwood, J. K. Durst, president, has declared a dividend of eight per cent.

Jellico, Tenn.—The Citizens' Bank has been organized with J. F. Archer, president, and A. W. Smith, vice-president.

Mineral Wells, Texas.—The Mineral Wells National Bank has been organized.

Nashville, Ark.—The bank previously reported as started by Brad Scott is the Bank of Nashville, capital stock \$50,000.

Quanah, Texas.—J. G. James, of Hemietta, W. E. Johnson and others will incorporate a bank with a capital stock of \$50,000.

Quincy, Fla.—The Quincy State Bank, previously reported, has been organized with E. P. Dismukes, president, and M. Munroe, vice-president. The capital stock has been increased from \$50,000 to \$60,000.

Springfield, N. C.—The People's Deposit Bank has been organized with G. D. Robertson, president.

Washington, D. C.—The name of the bank previously reported as organized by Allen C. Clark, John E. Herrell, G. F. Pyles and others, with a capital stock of \$200,000, is the National Capital Bank. W. B. Baldwin is cashier.

Waycross, Ga.—The South Georgia Bank, of Waycross, has been chartered.

Yorkville, S. C.—The Farmers' Alliance have organized the York County Farmers' Alliance Bank.

## Victor Turbine Water Wheel.

The cuts shown with this are of water wheels recently made by the Stillwell & Bierce Manufacturing Co., of Dayton, Ohio.

Fig. 1 shows a pair of Victor turbines on horizontal shaft. Seventeen pairs of these wheels are in use in the great new mill of the Appleton Paper & Pulp Co. at Appleton, Wis., and twelve pairs are in use at the large pulp mill of the Piscata-

## CAPITAL FOR CENTRAL SUGAR REFINERIES

WANTED — ALEXANDRIA, LA., August 15, 1889.—A few of us here wish to establish two, three or four central sugar mills, to be located in this parish. We have here the garden spot of the State and, I believe, the best sugar lands in the State. Most of our mills last year (the old-fashion, 3-roller mills) turned out from two to three hogheads sugar per acre, besides from four to five barrels molasses. We require capital to erect and start the mills. We propose to

refineries here that are making money fast, and those men wish to take stock in the new enterprise. They claim that a plant of the kind I mention—one that will make from four to five million hogheads of sugar per season—will pay for itself in three years after the cane is planted. An estimate of all the sugar planters puts the average yield of cane at 25 tons per acre, and at the present price of sugar the mills could pay \$4 per ton for cane delivered at the mill, which makes a handsome return for the far-

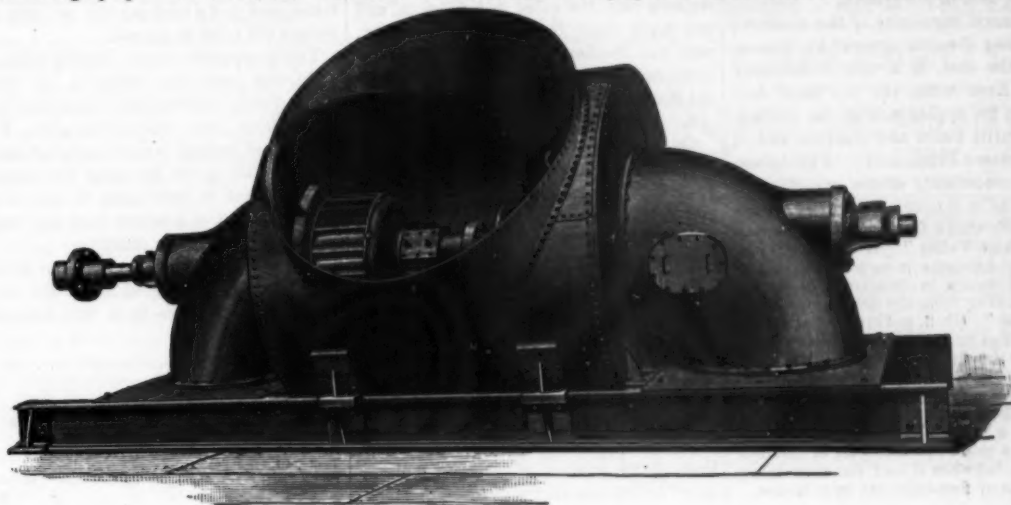


FIG. 1.

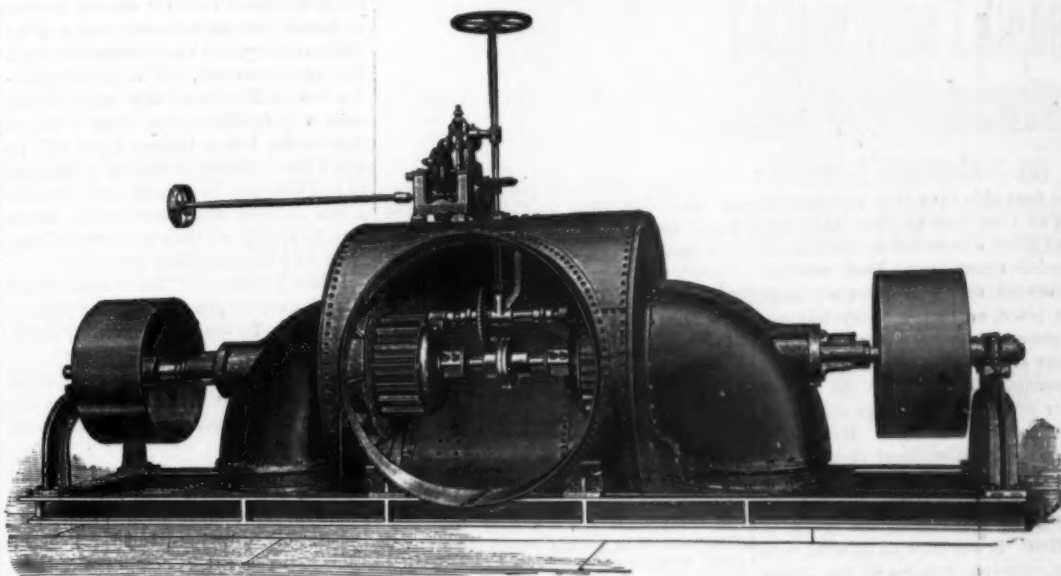


FIG. 2.

quis Falls Paper & Pulp Co. at Montague, Maine, and in a large number of the best paper and pulp mills.

Fig. 2 represents a pair of Victor turbine water wheels 20 inches in diameter with cast iron bed, driving pulleys and governor complete. They were furnished to the San Bernardino Electric Light & Power Co., of San Bernardino, California, and the details of construction are so plainly shown in the cut that no description is necessary.

Fig. 3 represents a single horizontal Victor turbine water wheel with grooved pulley for rope transmission placed under 90 feet head in the mill of J. G. Davis & Co., Rochester, N. Y. The situation is a difficult one and required engineering ability of a high order to satisfactorily meet the demands. Messrs. Davis & Co. write that the wheel is giving them the greatest satisfaction, and with 4 gate they are making 500 brls. of flour daily, and the throwing in or out of their 50-light dynamo and freight elevator with friction clutch is scarcely perceptible in the motion indicator.

**✎ If you wish to keep posted on the progress of the South, read the MANUFACTURERS' RECORD. Price \$4.00 a year.**

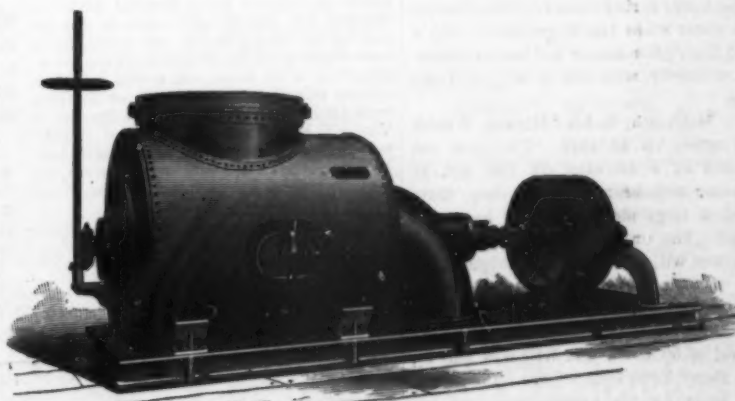


FIG. 3.

put in the diffusion process, which, as you have probably seen, makes as much as 250 hogheads sugar from a ton of cane, while the best results from the double mills (two 3-roller mills, one just behind the other) is about 160 hogheads, whereas the old mills now in use here can only obtain about 120 hogheads sugar per ton. Our planters are all anxious to go into the cultivation of cane, as it will make them five times as much as from the cotton crop. We have two small

mer and at the same time big money for the mill. An acre of cane can be cultivated at the same cost as an acre in cotton, and by the first of July the crop is made and does not require any work until October, when it is ready to be cut for the mill; whereas, the cotton crop lasts from January to January. The expense of planting cane is the greatest drawback, as it takes one acre in cane to plant five, but the stubble cane the first year is nearly as good as the plant.

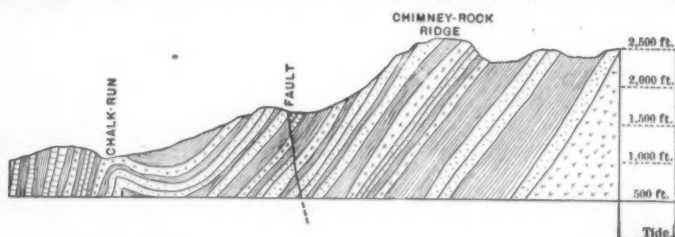
S. CULLEN.

[CONTINUED FROM PAGE 16.]

beyond question, to justify the erection of a modern furnace, with probabilities of comfortably supplying a number. The fact that the well-known Buena Vista furnace for a long period of years got all it wanted from one or two very modest openings proves nothing, for all that it used in fifty years, in its short charcoal blasts, wouldn't run a large modern coke furnace two years, and the mining of 80,000 to 100,000 tons of ore a year makes a very large hole in the ground.

The general regularity of the measures and the long distance covered by the outcrop of the ores, is a very satisfactory feature. Even when the ore itself does not make its appearance at the surface, the damcrite slates and clays do, and of these Professor Prime says: "This formation is economically of the greatest importance, as in it occur the brown hematite deposits which form the staple supply of the Lehigh Valley." (D. p. 7). "When the brown hematite is in place, it almost invariably occurs in damcrite or in the clays resulting from the decomposition of these slates" (D. p. 191). At all of the ore openings and pits on the Buena Vista property, the first thing that strikes the eye is this slate or clay, and it can be followed clear across the property some five or six miles.

Within a third of a mile from the railroad, and a short distance east of the new hotel, and between it and the mountains, are a series of foot-hills, cut by a ravine.



These foot-hills have been exploited by a series of cross cuts at short intervals, and each gives a remarkable showing of hard, solid brown ore. Now whether these cross-cut showings indicate a large vein in place, or that a heavy fold has taken place, the casual observer cannot determine from the work done, but he must conclude that whether the one or the other, there is a very large amount of cheap available ore in sight. But that a vein in place is either there or very near there, comes as a conviction when he reaches the "Engine House Pit," at the base of a low foot-hill, in the ravine of Chalk Run. It was from an opening here that the principal supplies of the Buena Vista and Amherst furnaces came through a series of years.

The heavy spring rains had filled the pit with water when the writer saw it, but a good description can be had from a competent authority, who saw it several years since.

Mr. McCreath, in his "Mineral Wealth of Virginia," p. 44, says: "The open cut consists of a circular pit 120 feet in diameter and nearly 50 feet deep, from which a large amount of ore has been mined. The ore comes near the surface at points, with probably an average of six feet of stripping. At the edge of the deposit and outside of its limits a shaft has been sunk to the depth of 91 feet. At a level of 50 feet a side drift was run in, and about 5,000 tons of ore mined from this point, but the present workings are on a lower level—viz., at a depth of 76 feet. Here a side drift in an easterly direction has been run in for a distance of 72 feet, where the ore bed was reached, thence in the same direction for 65 feet in good, rich, almost solid ore. At a point 27 feet from where the ore was first struck a drift runs in a south southwest direction for 63 feet in the same general character of ore. \* \* The general strike of the ore deposit is northeast and southwest, with an easterly dip, and it has been

traced in a southwest direction for a considerable distance. There can be no doubt but that the deposit is an extensive one. The bank yields one-half clear lump ore, and the bulk of the so-called wash ore must be simply the lump ore broken up in mining, for at no point examined does the bed show much clay. The fine ore washes three-fourths clear ore."

A short distance off another pit had been opened, from which considerable ore had been taken, but at the time of the writer's visit the sides had fallen in, and not much could be seen. Capt. Jordan, who was in charge of the mining operations, said that when their work stopped the floor of both pits was solid, high grade ore.

On the opposite side of the ravine, only a short distance away, and so located as to lead to the conclusion that it has no connection with the other openings, but is an entirely independent deposit of ore, is the Hayes Bank. The showing here is very large indeed and gives promise of great quantities of high grade ore.

This paper will hardly admit of any further elaboration of the question of ore supplies. We saw enough to make us think that there was a first-class prospect for a mining and pig iron industry. Whether there are five or six distinct leads of ore, or some of them are folds, or how the deposits may widen out, or pinch,

say 17x75 feet, averaging 100 to 125 tons a day, be erected at Buena Vista, at what cost can pig iron be made? There are admirable sites in close proximity to the ores and excellent limestone, water and railroads. We propose to make liberal estimates to cover contingencies. In putting the ore at the furnace at \$1.25 per ton, a royalty of 20 cents a ton is included, and a fair profit to the contractor. In the price of coke, the present selling price at the ovens at Flat Top, \$1.65 per ton, is taken, and  $\frac{1}{2}$  of a cent per ton per mile for freight 175 miles is allowed.

The prospective early development of additional large coal areas in the New River district leads to the conclusion that competition may reduce the cost. The distance of haulage is practically the same. Connellsville is too far away for current supplies, but is invaluable to fall back upon, in event of a failure from any cause whatever of the other districts.

One and one-eighth tons of coke to the ton of iron is considered ample for these easily reduced ores in a well-managed furnace.

2 1/2 tons of ore @ \$1.25.....	\$3.12
1 1/2 " coke @ \$1.65.....	3.32
3/4 " limestone @ 60 cts.....	.45
	\$6.89

Labor.....	\$1.25
Repairs.....	.50
Tools, oil, sand etc.....	.50
Incidentals, taxes, management, etc.....	.75
	3.00
	\$9.89

To some of the enthusiastic stockholders in the Buena Vista Co. who see in their projected town the industrial center of the whole country, and their prospective town lots worth, anyhow, half as much as similar lots on Broadway, this estimate may seem a trifle liberal, but those who put their money into a furnace plant will be much better pleased at the end of the year to find that they have made iron 50 cents a ton cheaper than anticipated, rather than to rectify all their previous calculations by a disappointing cost sheet.

In the judgment of the writer, Buena Vista is a capital place for not only pig-iron making, but for the establishment of collateral enterprises.

Apart from its apparently strong position as regards ore, fuel and lumber, it has one unusual advantage, which must not be overlooked.

It has three competing railroads for reaching the markets with manufactured products: The Shenandoah Valley, with the Norfolk & Western and the Pennsylvania railroads; the Chesapeake & Ohio, and the Baltimore & Ohio, all of these roads leading to the seaboard.

Booming town sites is about over, but with the extraordinary development of the country substantial prosperity must follow a combination of great natural resources and wise, prudent and energetic management.

**\$50,000 BUILDING—CHARLOTTE, N. C., August 19, 1889.**—I have secured the contract for designing Trinity College at Raleigh, N. C., to cost \$50,000, and will use either steam or hot water for heating purposes.  
S. L. LEARY.

	I.	II.	III.	IV.	V.
Sesquioxide of iron	73.51	81.33	82.09	71.92	68.08
" of manganese	.04	.06	.14	.10	.....
" of cobalt and nickel	.004	.006	.018	.004	.....
Oxide of zinc	pace	pace	pace	pace	.....
Oxide of copper	.014	.008	.024	.040	.....
Alumina	3.70	1.07	.83	3.62	.....
Silica	10.33	4.60	4.62	18.50	15.53
Lime	.46	.65	.37	.81	.....
Magnesia	.40	.32	.10	.41	.....
Sulphuric acid	.805	.602	Not determined.	.366	.....
Phosphoric acid	9.85	10.86	.437	10.04	.339
Water (combined)	.43	0.18	0.48	.63	.84
Moisture	99.983	99.706	99.539	100.06	.....
Metallic iron	51.46	56.93	57.46	50.66	47.61
Phosphorus	.391	.263	.191	.160	.148
Phosphorus in 100 parts of iron	.760	.462	.322	.309	.311

The sulphur runs from 0.1 to 0.2.  
I. Lump ore from opening No. 1.  
II. Lump ore from Hayes' Bank.  
III. Lump ore from shaft (Engine House pit.)  
IV. Coarse ore from shaft.  
V. Wash ore from shaft.

These ores speak for themselves. As assuming that a first class modern furnace,

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**SAW AND STAVE MILLS—CHICAGO, August 12, 1889.**—The Frank Lumber & Stave Co. have erected extensive stave works and a saw mill at Frank Station, five miles east of Johnsonville, Tenn., on the Nashville, Chattanooga & St. Louis Railway. The newest and most approved machinery was procured. For the present only tight barrel work will be made at the stave mill, such as whiskey, pork and oil barrel staves and headings, and also beer keg material. Later on, likely, slack barrel material and heading will be made. The saw mill is a "Lane & Boddy," of Cincinnati, and we intend to saw poplar, oak and hickory, and shall also quarter-saw a good deal of oak. We will utilize all the limbs and branches which can be cut into cordwood. We intend to employ fully 100 men. If freight charges from that portion of Tennessee, especially by river, to Cairo and Chicago were more reasonable, we would employ 500 men. The Waverly Timber & Iron Co., for which I am manager, own 43,000 acres of hardwood timber in Humphrey Co., Tenn., and they, too, will soon begin extensive operations. Our principal market for the present is Chicago, though we shall be glad to meet buyers from other cities.  
JOSEPH FRANK, Manager,  
113 Franklin street, Chicago, Ill.

## WANTS.

**MECHANICAL DRAUGHTSMAN** familiar with millwright work and iron machinery in general. Address THE JEFFREY MFG. CO., Columbus, Ohio.

**WANTED**—A machine that will crack round peas after they are kiln-dried, separate the skins from the peas and blow same out. Address J. B. care Lord & Thomas, Chicago, Ill.

**WANTED SITUATION**—By practical mechanic and designer, as superintendent or foreman. Used to small work, at present taking charge of thirty men. Address P. O. Box 299, Grand Crossing, Ill.

**WANTED**—Correspondence relative to investing in valuable Sand and Limestone Quarries in Alabama. I have some extra inducements to offer in Stone Quarries. Will send samples if desired. J. W. HARRIS, Box 342, Anniston, Ala.

**A THOROUGHLY COMPETENT MINING ENGINEER**—Ran certified Mine Manager, experienced in opening up and developing mines, desires an engagement. Fifteen years' experience. Highest references. Address MINING ENGINEER, care Manufacturers' Record.

## WANTED.

A PARTNER with experience in the manufacture of Sash, Doors and Blinds, who has \$5,000 to invest in an established business. Good location and prospects of a large trade. Address

S. L. PARSONS,  
Sandersville, Ga.

**THE OWNERS OF A PATENT SPARK EXTINGUISHER** desire a party with money to push sales. It is a perfect success, designed principally for agricultural engines. Small, handy, easily adjusted and so light that a canvasser can carry 25 in a buggy. Sold to limited extent with success last fall, but have not the money to carry on the business largely. Pays an immense profit and presents rare opportunity for moderate amount of money. The season in the cotton belt is about at hand and almost any territory can be secured. Would prefer giving an interest in profits but would sell also. Address INVENTOR,  
P. O. Drawer 61, Yorkville, S. C.

## WANTED.

Parties with capital and skill to erect and operate a

## 50-Ton Charcoal Furnace

on our property.

Cost of making Charcoal, Pig and Wheel Iron \$13 per ton. Freight on output to market \$2.50 to \$3.00.

Also parties with same to make Charcoal Blooms. Cost of Blooms \$22 per ton.

Cost of Charcoal 4 1/2 to 5 cents per bushel of 26.80 inches. By burning in improved kilns and saving bi-products the charcoal can be had as a bi-product itself.

**MAGNETIC ORES**—Average Analysis, 55 to 65 per cent. Metallic Iron; Silica, 4 to 6 per cent.; Manganese, none; Titanium, none; Phosphorus, .001 to .025 per cent.

ADDRESS

**JOHN L. BLACK,**

Managing Director, BLACKSBURG, S. C.

OR SEE

WM. M. ELLIOTT & SONS, BALTIMORE, MD.



## Eastern Lumber Markets.

[Special correspondence MANUFACTURERS' RECORD.]

New York, August 30, 1889.

The week has been a very quiet one in lumber trade circles. Dealers say very little new business has been transacted, but that receipts on previous engagements are quite large. The yards are well stocked with both soft and hard woods. Building operations continue on a large scale, not only in and around this city, but in nearly all markets which New York supplies. Our outside advices show no unusual movements in lumber. Chicago people who have been with us this week report no decadence in the white pine movements, but find fault with the refusal of the country to promptly take all that their mills have the capacity to turn out. But Chicago never was pleased with even her most brilliant achievements. She is now after the world's fair of 1892, and so far as getting together the cash, she will surpass New York. We are a commercial people, and perhaps have not quite as much of that thing called public spirit as some other places. There is very little to be said concerning lumber this week, because most of our August and September wants were covered 30 days ago. This is not considered a good month to buy ahead, but as soon as September comes buyers from all quarters may be expected. The wholesalers also will then renew their engagements for yellow pine and for hardwood. Some Georgia parties have been here to study the situation and make arrangements to be represented. They find this necessary. They can then act more intelligently. But small producers, men running single mill and the like, cannot do better than they are now doing.

Our receipts of yellow pine have not fallen off this summer, notwithstanding the very large stocks hurried in during the second quarter of the year. The trouble over cut prices has partly disappeared. Yellow pine will probably not be crowded below its present figures. Vessel rates are favorable, and the country distribution is keeping supplies here under control. The old story about North Carolina pine must be once more told, for want of something new to say. The story is an interesting one, because everything that the lumber manufacturers there send us sells.

We are now in the midst of our house-furnishing season. We are using all manner of wood for this purpose.

Reports from Boston to-day show a relatively better business than two weeks ago. Albany is doing well. Business is active all along the lakes. We have a good many callers from the South. They come for news and information, bringing little except that business of all kinds is booming.

The exports of walnut are large in this market. The export trade generally is heavy. Quartered oak quotations have not varied for some weeks. Plain oak can occasionally be picked up at a bargain. Poplar is slowly recovering lost ground. Ash is doing well under the persistent work of agents. Cottonwood is finding a fair market. The usual quantity of cypress is going to the manufacturers.

We hear no end of syndicates. Foreign capital is rushing to this side. Our business men are in high spirits over fall prospects. Next week will bring some interesting information concerning Southern lumber in Northern markets.

ADVERTISERS wishing to reach manufacturers of all classes, mining companies, steel, iron and hardware dealers of the entire South, cannot find a better medium than the MANUFACTURERS' RECORD.

WHAT Texas needs, says the Texas Live Stock Journal, as a safeguard for her live stock interests is a home market of respectable dimensions, supported by canneries, pork-packing houses and dressed beef establishments, not necessarily to consume everything, but to furnish the safeguard so necessary to relieve the greater markets of the eternal strain of over supplies. Such a home market must have a beginning, and to get that beginning stockmen must exert themselves. It is not necessary for the stockmen as a body to go into the canning or beef-packing business, but they can offer some inducements for others to do so. They could offer a bonus, guarantee the rental of buildings for a term of years, or offer so much per head for the first hundred thousand cattle killed and canned in the State. Individual stockmen who might be able could take stock in the enterprise.

WANTS GRADING MACHINERY.—CLINTON, S. C., August 15, 1889.—We have contract for grading and masonry on Georgia, Carolina & Northern Railway. Will need such machinery as carts, scrapers, railroad plow, dump cars, track and rock tools.

HOLSHOUSE &amp; SCHILTZ.

WILL BUILD STOVE FOUNDRY.—FORT WORTH, TEX., August 16, 1889.—We will build a stove and foundry works at this place soon as material can be had, buildings to be of brick, 60x125, one story; 34x80, two story; 15x24, two story; 24x65, one story; 15x24, one story. Will buy new machinery and equipment out and out. Will go on the market in about 30 days for same. FORT WORTH STOVE & FOUNDRY CO.

## Trade-Marks Recently Issued from the U. S. Patent Office

Messrs. Higdon & Higdon, Solicitors of Patents and Trade-Marks, St. Cloud Building, opposite U. S. Patent Office, Washington, D. C., report the following list of trade-marks recently registered:

No. 16,898.—Steam Valves and Water Valves.—Fairbanks & Co., New York, N. Y. Application filed June 17, 1889. Used since December 10, 1888. The letters "XL" surrounded by or inclosed in a circle.

No. 16,899.—Steam Valves and Water Valves.—Fairbanks & Co., New York, N. Y. Application filed June 17, 1889. Used since December 10, 1888. The letters and character "F. & Co." inclosed in or surrounded by a triangle.

No. 16,915.—Composition Watch Cases.—The Duber Watch Case Manufacturing Co., Cincinnati and Canton, Ohio. Application filed May 6, 1889. Used since April 25, 1884. The word "Silverine."

No. 16,914.—Varnishes, Stains, Japans, Surfaces and kindred goods.—The Watts De Golyer Co., Chicago, Ill. Application filed July 5, 1889. Used since March 15, 1889. The word "Rock."

## PROPOSALS.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 5 o'clock P. M. on the 10th day of September, 1889, for all the labor and materials required to complete the approaches to the U. S. Postoffice, &c., building at St. Joseph, Mo., in accordance with specification and drawing, copies of which may be had on application to this office and the office of the Superintendent. Each bid must be accompanied by a certified check for \$100. JAS. H. WINDRIM, Supervising Architect. August 17, 1889.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 5 o'clock P. M. on the 3rd day of September, 1889, for all the labor and materials required to complete the approaches to the U. S. Postoffice, &c., building at Minneapolis, Minn., in accordance with the drawing and specification, copies of which may be had on application at this office or the office of the Superintendent. Each bid must be accompanied by a certified check for \$100. JAS. H. WINDRIM, Supervising Architect. August 14th, 1889.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 5 o'clock P. M. on the 27th day of August, 1889, for all the labor and materials required for the iron and wood floor, ceiling and roof construction, iron work of stairs, slate and copper work of roof, down pipes, etc., required to enclose the United States Postoffice, &c., building at Dayton, Ohio, ready for interior finish, in strict accordance with the drawings and specification, copies of which may be had on application at this office and the office of the Superintendent. Each bid must be accompanied by a certified check for \$100. JAS. H. WINDRIM, Supervising Architect. August 7th, 1889.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 5 o'clock P. M. on the 27th day of August, 1889, for all the labor and materials required for the iron and wood floor, ceiling and roof construction, iron work of stairs, slate and copper work of roof, down pipes, etc., required to enclose the United States Postoffice, &c., building at Dayton, Ohio, ready for interior finish, in strict accordance with the drawings and specification, copies of which may be had on application at this office and the office of the Superintendent. Each bid must be accompanied by a certified check for \$100. JAS. H. WINDRIM, Supervising Architect. August 7th, 1889.

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Nashville, Tenn.

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Nashville, Tenn.



## ATHENS, GA.

### A Classic North Georgia Town and Something About Its Industries, &c.

[Special correspondence MANUFACTURERS' RECORD.]

ATHENS, GA., August 17, 1889

The State of Georgia, by some measure of general consent on the part of its people,

ing purposes. Geographically considered, Athens is one of the most charming of Georgia towns. Its high altitude, salubrious climate, pure water and romantic surroundings impress the traveler, and so early as 1799 attracted public attention, and soon after, in 1801, the legislature of the State by formal enactment located the State University there and endowed it.

Some years ago the writer visited Athens for the first time, having reached it over

with all modern appliances. Indeed it may be remarked in this connection that there is no town or city in Georgia, or in any Southern State, whose residents enjoy more educational advantages. A liberal system of public free schools is not only maintained, but the university of the State is practically free, no fees being charged for tuition in any of its courses. Inquiry into the methods of teaching in the public schools developed the fact that they are practically the same as taught in the best disciplined schools North and South, and above fifty per cent. of the school population of the city, white and colored, are receiving instruction, a commendably large number. Besides the State University, the Lucy Cobb Institute for females is located here and enjoys a large patronage from Georgia and contiguous States.

As a market place Athens has advantages over many of the neighboring towns. The completion of new railroads to her gates is constantly widening the field for her merchants. Only a few years ago the town drew its patronage wholly from the mountain regions to the north and from the contiguous counties, but to day her jobbing houses travel salesmen into territories long pre-empted by the larger cities, and, if one may judge by the busy appearance of her warehouses, her business men are prosperous and their trade is satisfactory. I have been unable to obtain an approximate statement of the trade of the town for the year 1888, but for the year previous, 1887, it amounted to quite \$8,500,000, not including the products of three cotton factories, which, if added,

In the matter of manufactures the city has a fair share, although the field is unfilled, and many industries are unrepresented. Located on the river falls are three cotton factories, and in the town is an iron and brass foundry. The three cotton mills have an aggregate of about 30,000 spindles and over 600 looms. Their products are a superior class of check cotton goods and yarns, which find ready sale in the markets of New York, Philadelphia and Boston. One of these mills was built as far back as 1835, and the capital first employed was only \$30,000. It was christened the "Athens Mills," and the superior quality of its goods, known as "Athens checks," soon enabled the stockholders to increase their facilities for work, until the present structure, with its valuable water power and franchises, resulted. The "Georgia" and "Princeton" mills are located near by, and each is apparently enjoying its full share of prosperity. It might be added that the rapids on which these factories are located afford other superior mill sites, and the working power of the stream is said to be double that of the great \$2,000,000 canal at Augusta, which furnishes the water-power for all the manufacturing industries of that city.

A brief summary of the manufactures of Athens, from a late issue of the Constitution, will show that there is already a solid foundation for great industrial development.

"Her cotton factories stand first. They are:

The Athens Cotton Manufacturing Co., with \$125,000 capital, 10,000 spindles, 350 looms, employing 300 hands and consuming annually 4,000 bales of cotton. Its power is principally water, but steam is also used.

The Georgia Manufacturing Co., with \$120,000 capital, 8,000 spindles, soon to be increased to 10,000, with 120 looms, employing 200 hands and consuming 3,000 bales of cotton.

The Barnett Shoals Thread Factory, now almost completed, with \$100,000 capital, 5,000 spindles and to employ about 60 hands. The mill will make No. 20 yarns.

Princeton Factory, with \$100,000 capital, 5,000 spindles, 120 looms, employing 105 hands and consuming 1,500 bales of cotton.

High Shoals Cotton Factory, with \$120,000 capital, 6,000 spindles, 100 looms, 150 hands and consuming 2,500 bales of cotton.

Then there is the Athens Foundry &

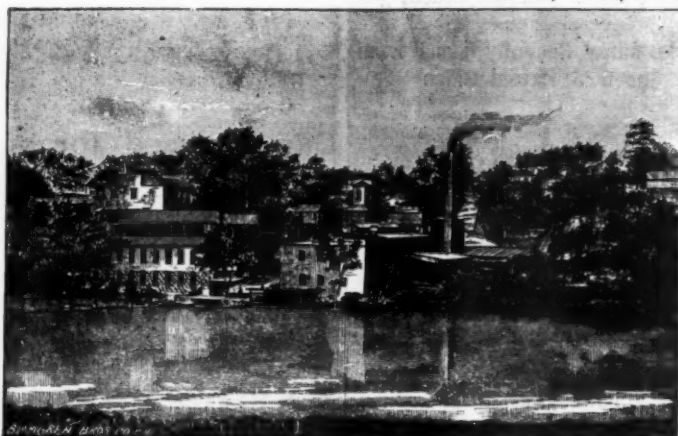


A BUSINESS STREET, WITH A VIEW OF THE STATE UNIVERSITY

ple is divided into three portions or sections, whose boundary lines cross the State latitudinally from the Savannah river on the east to the Chattahoochee on the west. The largest of these is the Southern or "Wire Grass" division, which has a northern limit about the neighborhood of Macon, and embraces the cotton belt proper, the rice and other coast industries, and the magnificent lumber and turpentine forests for which the State is noted. North of this "Wire Grass" country is "Middle Georgia" or the "red belt," about which so much has been written, and which in ante bellum days was the most fertile and prosperous portion of the State. This section of "Middle Georgia" extends well up above the capital city of Atlanta to the foot hills of the mountain or "Cherokee" division, the latter covering all of the Blue Ridge region, and being named, presumably, in honor of the superb race of Indians who first inhabited its soil.

It would seem that the partition of the State into three sections might have sufficed for all local needs, but the Georgians have gone to work and run other longitudinal lines, which separate both the "Wire Grass" and "Cherokee" divisions in twain. An imaginary line falls from a point near the city of Macon to the Florida limit, and all of the counties west of it, a fertile cotton region, abutting upon Alabama, are popularly known as "South-west Georgia." A similar division has been effected in the Northern or Cherokee section by the quiet secession of those counties east of the Piedmont Air Line from their sisters, and the establishing of a new territory of their own, called "Northeast Georgia," of which the picturesque little city of Athens is the political and commercial capital.

It is about this thrifty town and its industries that I now propose to write, for until a very few years ago its development and growth had barely begun. Athens is the county town of the county of Clarke, and is a place of about 8,000 inhabitants. It is situated on a high bluff overlooking the Oconee river, a shallow mountain stream, whose current breaks into a series of rapids opposite the town, furnishing an almost unlimited power for manufactur-



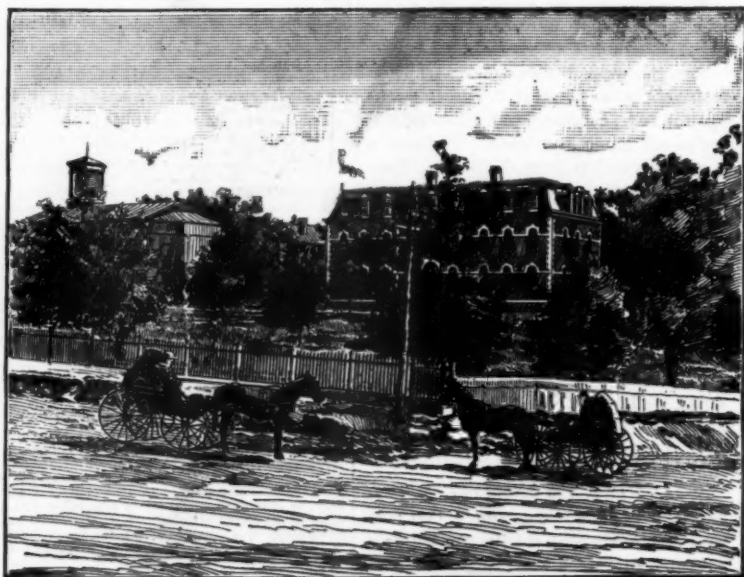
ATHENS MANUFACTURING CO. - R. L. BLOOMFIELD PRESIDENT.

an insecure forty miles of rail, which connected at the village of Union Point with the railroad between Atlanta and Augusta. It was then, as it had been for a half century or more previous, a sleepy university town enjoying a local trade only with the neighboring counties, and content, apparently, with its peculiar and complete isolation. But a brighter day soon afterwards dawned upon the place, when a spur or branch railroad thrown out by the Piedmont system touched it, binding it more nearly to the world's markets and ridding it of the railroad monopoly that had for generations sapped its industries and retarded its growth. The beneficial effects of this competition were felt immediately, new vigor was infused into its citizens, and the busy city of to day, with its factories and mills, its big jobbing houses, cotton compresses, well-lighted streets, water supply, public schools, street railways, etc., has supplanted the old university town as if the change had been wrought by magic.

Some shrewd observer has declared that the appearance of the churches and school buildings of a community suggested a fair idea of its moral tone and business prosperity. Measured by such a rule, Athens would undoubtedly pass for a prosperous city, her church edifices being imposing and beautiful, and her public schoolhouses ornamental and comfortable and equipped

would make the total \$700,000 more. The cotton receipts of the place are very large. In 1887 100,000 bales of cotton were received, put through steam compresses and shipped to Northern and Eastern factories and ports.

Machine Works, with \$43,000 capital and employing 40 hands. This has been remarkably successful, having paid to the stockholders in dividends within the past eight years \$65,000 in cash, and now having on hand some \$40,000 in cash.



STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS.



Mr. Thomas Bailey, the general manager of this foundry, has been so successful with it that he has just decided to build a new one. He has organized the company and will build it immediately.

Athens also has a paper mill with \$40,000 capital, making the best grades of news and manilla papers.

It has perhaps the only bobbin factory in the South, making them from the native woods grown in the surrounding country.



JACKSON STREET FREE SCHOOL AND WATER TOWER.

It has a guano factory with \$50,000 capital, a cotton seed oil mill with \$25,000 capital, two large grist mills in operation and another being built, two compresses, an ice factory, two large planing mills, a pottery with \$20,000 capital and employing 25 hands, making tiles and drain pipes, five large cotton warehouses, two building and loan associations, three banks, two carriage and wagon manufactories, and various other small industries, employing from one to half a dozen hands, while a furniture factory is to be built this fall.

Athens, as a business point, is one of the best in the State. In the first place, its banking capital, in proportion to population, is larger than any city in Georgia. The national bank has \$100,000 capital and something over \$200,000 surplus, while it pays 20 per cent. to its stockholders annually. The University Bank has \$125,000 capital and \$15,000 surplus. It pays 10 per cent. Then there is a savings bank with a small capital. Besides these, the Georgia Railroad & Banking Co. have recently decided to establish a bank here and will probably do so in the near future.

Her business men are chocked full of pluck and energy, and are always at work extending Athens's trade. They now have five grocery houses, two dry goods houses, one shoe house and two hardware houses, doing an almost exclusive wholesale business. These houses keep twenty-five drummers out at all times, and Athens's trade extends for from fifty to one hundred miles in all directions."

It would seem that Athens is to be the railway center of Northeast Georgia. Already three lines have their termini in the town, and the trunk line connecting Atlanta with the Roanoke system to Norfolk, now being built and called the Georgia, Carolina & Northern, will pass directly through the city. Surrounded as the place is by fertile agricultural counties, and with ample banking capital, it will doubtless soon become the distributing point for the large area of which it is the geographical center. Indeed, I know of no town in the State whose future is more fully assured and where so many inducements are offered in the matter of investments in both landed estate and business enterprises.

Another pleasing feature of the city is its many beautiful homes and its cultured society. The location of the State University early in the present century attracted to the place many families who were able and desirous of educating their

children in this college, and the intermixture of old *ante bellum* mansions, with their fluted pilasters and broad lawns, with the more modern residences of the period, affords a striking as well as gratifying architectural effect, on which the eye delights to linger. The town covers a large area, but the suburban houses and adjacent villas have been made conveniently accessible by the building of street railways owned by a Philadelphia syndi-

cate, who propose soon to further improve their service with new cars and electric motors. Among the notable houses that attract the attention of the visitor is that of the late Senator Ben Hill, the Cobbs, Howell and Thomas, and the birthplace of



COURTHOUSE - CLARK COUNTY.

Henry W. Grady, the brilliant orator and present editor of the Atlanta Constitution. All of these grand old places are held in reverence by the older citizens, and they point them out with pardonable pride to the stranger.

One of the needs of the place at this juncture is a hotel building capable of accommodating the traveling public and the many visitors who are attracted to the place during the summer season for health and pleasure. Prominent citizens are ready to contribute liberally to the erection of a hotel to cost \$100,000, as they seem to think a building of that price is an imperative necessity. Several attractive sites in the business part of the city have been offered, and it is thought that one-fourth or one-half the money necessary for the enterprise can be readily interested.

Another need of the place is furniture and woodenware factories. The adjacent forests furnish a limitless supply of oak, hickory, pine and poplar timber, whose cost is nominal, and that might be utilized by some manufacturer with the necessary capital and energy to secure it. Especially along the new lines of railroad, the Macon & Covington, and the Georgia, Carolina & Northern, are these fine forests dense and inviting.

The fruits are grown in abundance in this section. Peaches, apples, pears and the grape flourish here, as they do in nearly

all sections of the State of Georgia. A prominent citizen, Hon. H. H. Carleton, member of Congress from the Athens district, whose beautiful villa is one of the most attractive sights in the suburbs, assured me that he would lose by rotting 1,000 bushels of the finest varieties of peaches this season. No market is the complaint, and yet the town is without a canning factory to garner up all this waste. I know of no better opening for some enterprising Northern man with a small capital than the building of an enterprise of this character in Athens. It will yield big results.

In conclusion, I may add for the information of the MANUFACTURERS' RECORD many Northern readers that the people everywhere in Georgia are conservative and hospitable. No Northern man who desires to invest his money in a Georgia enterprise or take up his residence in this State need torture himself with the thought that his interests, personal and otherwise, will be jeopardized. In Athens, as elsewhere in Georgia, the people are at work—earnestly at work—and the scars of civil war, as well as its bitterness, are fast fading away. The people are polite and hospitable to strangers.

To any person who may wish to further investigate the advantages offered by the town of Athens and vicinity for investments, etc., I beg to refer them to any one of the following committee of citizens who will cheerfully answer any correspondence that may be addressed to them on the subject, viz: Messrs. Ferdinand Phinixy, E. T. Brown, T. L. Gaut, C. G.

land company recently organized, the daily newspaper, the mercantile and manufacturing interests of the community, and the university corp of teachers.

E. P. SPEER.

### A Big Enterprise.

Regarding the sale of 19,000 acres of coal lands near Chattanooga to Col. J. B. Goode, of Dallas, Texas, reported lately in the MANUFACTURERS' RECORD, we have been furnished with the following statements:

"Full and correct surveys of the land have been made and 41 test shafts have been sunk, in 30 of which the very best article of coal was found, in beds of from 2 to 10 feet in depth. These shafts were over various parts of the land, which lies from 9 to 13 miles northwest of Chattanooga and in about 5 miles of the river, lying in both Hamilton and Marion counties. A company with a capital stock of \$500,000 has been formed with Col. Goode at its head, and it is proposed that 10 complete mines shall be put into active operation this fall. These will be so arranged that a dummy line will dump their proceeds into the company's own coal boats on the river, which will deliver coal to all points on the Mississippi river and its tributaries at a very low price. The dummy line will have railroad connection also. Colonel Goode has expressed a determination to put \$1,000,000 into this enterprise if necessary.

The lands alone cost \$100,000, and he is now disposing of a large portion of his Texas lands and Dallas city property for cash, in order to place the company on a firm foundation, financially, from the start. He says that he expects to reach Chattanooga about October 1st to 15th, and that he will then give this business his entire attention. Col. Goode says that he will only purchase the very best machinery of all kinds. This, it is estimated, will cost not less than \$200,000, and will consist of all manner of mining tools and machinery, engines and cars for dummy line and coal boats, and all will be of the best and latest improved stock."

THE National Pulley Covering Co., of Baltimore, have lately received the following letter from Messrs. Henry McShane & Co., of this city: "On August 2d we put on two of your 'covers.' The main pulley is



ATHENS BOBBIN MILL - ONLY ONE IN THE SOUTH

Talmage, C. W. Baldwin, R. K. Reeves, A. H. Hodson, F. W. Cheney G. H. Yancey, W. D. O'Farrell, A. E. Griffith, Prof. H. C. White.

The names of these gentlemen are published by permission. They represent the profession, capitalists, members of the

36 inches diameter, 9-inch belt, making 105 revolutions per minute, and the counter pulley 36 inches diameter, 9 inch belt, making 100 revolutions per minute. We now find that since putting on your covering the main pulley makes 133 revolutions per minute and the counter pulley 120 revolutions per minute."



**WHAT YOU HAVE LONG SOUGHT!**  
THE "BOSS" FLUSH T-BEVEL.



**DESCRIPTION.**—Die attached to blade is marked # for Square (90°), W for Window Mill Pitch (50°), O for Octagon (22½°), Ø for Hexagon (30°), H for Hinge (45°). Move to mark desired, lock by pressing button on side and fasten by turning thumb-out.

PRICE: 1. In. Size. \$1.50. Postage prepaid.

**THE HILL BEVEL CO.**  
MANCHESTER, CONN.





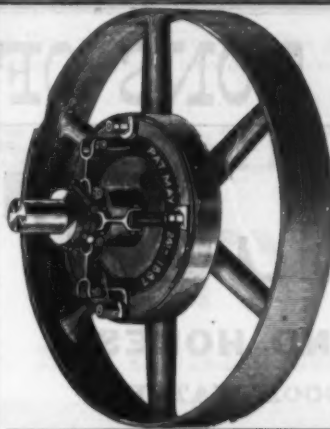
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## HILL Clutch Works, CLEVELAND, OHIO.

NEW YORK:  
18 CORTLAND STREET.  
CHICAGO: MINNEAPOLIS:  
28 S. Canal Street. 305 Kasota Bldg.  
KANSAS CITY, MO.:  
1221 Union Avenue.

### POWER PLANTS Designed, Erected and Furnished.

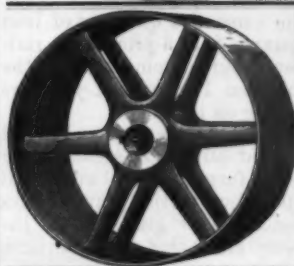
Send for new Catalogue, Power Transmission Machinery.



## The MOORE & WHITE CO.

1312 Buttonwood St., PHILADELPHIA, PA.

Friction Clutches, &  
Cut-Off Couplings, &c.  
Paper Mill  
Machinery, &c.



### SHAFTING, HANGERS, AND PULLEYS A SPECIALTY. FIRST-CLASS IN EVERY RESPECT.

Send Specifications for Estimates before Contracting.

THE LANE & BODLEY CO.  
2 to 44 JOHN ST., CINCINNATI, O.

## Machine Molded Pulleys, Hangers, Boxes

COUPLINGS AND SHAFTING.

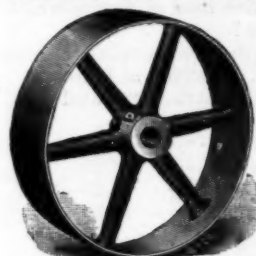
FIRE FRONTS, HEAVY MACHINE CASTINGS  
OF ALL DESCRIPTIONS.

HOISTING AND TRANSMISSION SHEAVES.

Get Our Prices Before Purchasing.

Estimates given on Pulleys and Band Wheels to 10 feet in diameter. Send for Catalogue.

TODD PULLEY AND SHAFTING WORKS  
EAST ST. LOUIS, ILL.

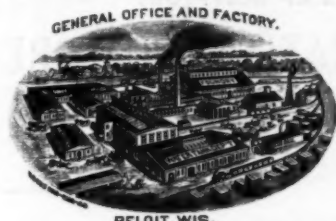


## Shafting, Hangers.

Cases of every Description made.

Stationary, Drifters Mill and Boiler Work.

JNO. N. MARQUETTE, 118 W. Falls Ave., {Near Front Street} BALTIMORE, MD.



### ECLIPSE FRICTION CLUTCH PULLEYS AND CUT-OFF COUPLINGS.

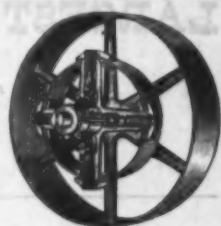
SEATTLE, WASHINGTON TER., 5 26, 1889.

Eclipse Wind Engine Co., Beloit, Wis.  
DEAR SIR: The Clutch Pulley (diam. 106 in., face 21 in) works satisfactorily in every particular, and is a great convenience. We have two, and can stop either the main saws or the gang edger, or both whenever desired, without stopping the engines.  
Yours respectfully,  
Yeeler Wood, Coal & Lumber Co.,  
J. D. Lowman, Sec'y.

### ECLIPSE WIND ENGINE CO., - Beloit, Wis.

Send for July, 1889 catalogue, and see where and by whom they are used.

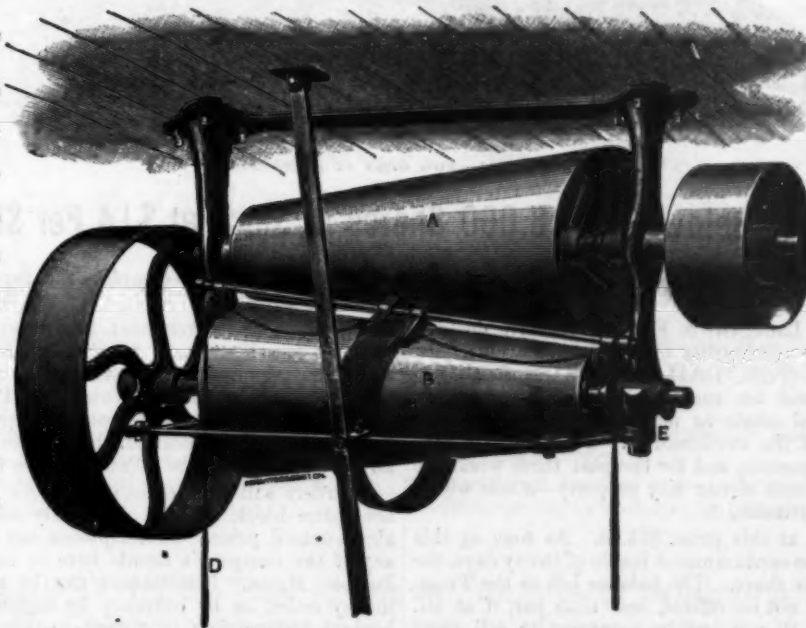
St. JOSEPH, Mo., June 24, 1889.  
Eclipse Wind Engine Co., Beloit, Wis.  
GENTLEMEN: The Clutch Pulley reached us all right: it works to a charm. If we had put it on last April, in place of one we had, we should now be ahead over \$300, which we have lost in time and breakages. Yours,  
The Brick & Terra Cotta Mfg. Co.,  
F. F. Halsey, Sec'y.



# THE EVANS PATENT FRICTION CONES

FOR CHANGING AND REGULATING THE SPEED OF MACHINES.

The speed can be varied while the machine is running, or the machine stopped by simply turning a band wheel or moving a shipper. Straight faced frictions on the same principle of a loose belt can be used to couple auxiliary power, or made to run power pumps. They are efficient and noiseless, and give operator entire control of machine. Send for illustrated catalogue to



The following parties are using our Cones:

Acme Machinery Co., Cleveland, Ohio.  
S. D. Warren & Co., Cumberland Mills, Me.  
Portland Locomotive Works, Portland, Me.  
Synn & Dudley Paper Co., Holyoke, Mass.  
Pratt & Whitney Co., Hartford, Conn.  
Masos Locomotive Works, Taunton, Mass.  
Russell Paper Co., Lawrence, Mass.  
Rice & Co. Wire Cloth Works, Lowell, Mass.  
Haverhill Paper Co., Haverhill, Mass.  
Wilson, Cass Co., Philadelphia, Pa.  
Fall Mountain Paper Co., Bellows Falls, Vt.  
Chase & Co., Boston, Mass.  
Waltham Emery Wheel Co., Waltham, Mass.  
Rice, Barton & Fales Machine & Iron Co., Worcester, Mass.  
Parsons Paper Co., Holyoke, Mass.  
Hollingsworth & Vose, Groton, Mass.  
Hollingsworth & Whitney, Gardiner, Me.  
A. T. Dennison, Detroit, Mich.  
Kitson Machine Co., Lowell, Mass.  
Merrill & Co., Lowell, Mass.  
Troy Cotton & Woolen Co., Fall River, Mass.  
Plymouth Woolen Co., Plymouth, Mass.  
P. A. Dowd & Co., New York, N. Y.  
John Cochran, Jr., Malden, Mass.  
Holyoke Hydrant & Iron Works, Holyoke, Mass.  
French & Ward, Stoughton, Mass.  
Lowell Bleachery, Lowell, Mass.  
Pacific Mills, Lawrence, Mass.  
Washburn & Moos Mfg. Co., Worcester, Mass.  
Geo. W. Fales, Providence, R. I.  
American Tool & Machine Co., Boston, Mass.  
Wilkinson Bros., Birmingham, Conn.  
These embrace Cones of various sizes and patterns, and ranging from 1 to 50 horse power.

## THE EVANS FRICTION CONE COMPANY,

85 WATER STREET, BOSTON, MASS.

# 200,000,000 TONS OF BROWN IRON ORE

## IN SIGHT AT BLUFFTON,

HIGH, HEALTHY AND HONEST.

GOOD PEOPLE AND GOOD WATER.

Cherokee County, Ala.

It is impossible to describe by words the enormous quantity of iron ore that is in sight on the land of this company. Said a prominent railroad man of the South: "I could not believe your statement as to the quantity, (200,000,000 tons in sight), but now that I have seen your ore deposits, I wonder how you put so low an estimate on them."

Prof. Robinson, of Bowdoin College, Brunswick, Maine, says: "I found at Bluffton iron ore in abundance, partly in solid cliff masses containing hundreds of thousands of tons, and partly in the form of gravel and small boulders lying in great banks similar in appearance to the gravel banks of New England. Whether there was as much of the gravel as of the bluff ore I could hardly judge, but it was very clear that the quantities of both were simply enormous."

G. S. Patterson, mining engineer, of Anniston, Ala., reports: "The amount of ore in sight was certainly beyond my expectation, though I was prepared to find a large deposit. The Bluff, as it is called, is a solid mass of ore on the side of a mountain, easily approachable, and can be mined cheaper than at any point in Alabama or Georgia, with which I am familiar."

Mr. Wm. H. Edmonds, of the Manufacturers' Record, says: "As to

the quantity of ore here, I don't suppose that all the furnaces in Alabama could use it up in a lifetime."—See Manufacturers' Record May 18, 1889, article entitled "BILL ARP AND BLUFFTON."

Ore can be delivered at furnaces built here at a cost not exceeding 50 cents per ton.

With high grade ores, analyzing over 50 per cent. metallic iron, delivered at the furnace at the above-named price, is there any possibility of such a place as Bluffton not being able to produce iron at figures which will yield a profit despite the dullest of dull times?

Prof. J. H. Pratt, of Birmingham, Ala., reports on samples selected from our property by Mr. Edmonds and Mr. G. S. Patterson as follows:

The sample of brown iron ore, marked "Bluff Ore," contains—	The sample marked "Gravel Ore" contains—
Metallic iron, - - 52.37 per cent.	Metallic iron, - - 53.23 per cent.
Phosphorus, - - - 0.782 "	Phosphorus, - - - 0.931 "
Silica, - - - 14.60 "	Silica, - - - 6.25 "
Water combined, - 8.10 "	Water combined, - 10.20 "
Moisture at 100° C - 2.50 "	Moisture at 100° C - 1.68 "

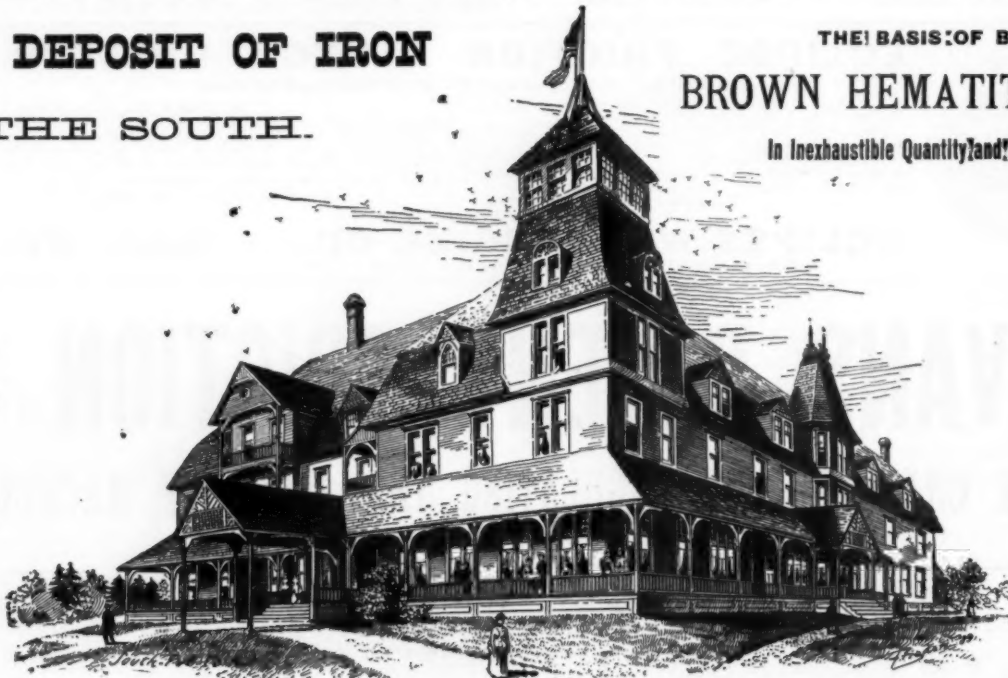
### LARGEST DEPOSIT OF IRON IN THE SOUTH.

THE BASIS OF BLUFFTON:

### BROWN HEMATITE IRON ORE

In Inexhaustible Quantity and Excellent Quality.

Ore can be delivered at furnaces built here at a cost not exceeding 50 cents per ton.



THE SIGNAL—NOW OPEN AT BLUFFTON.

Located on the Selma Division of the East Tennessee, Virginia & Georgia Railway, midway between Rome and Anniston, and only two miles and three-fourths from the East & West Railroad, of Alabama.

A Dividend-Paying Stock Below Par. 8,000 Shares of Stock at \$14 Per Share—Par Value \$25.

#### PRICE OF STOCK:

The directors of the Bluffton Land, Ore & Furnace Co. have decided to offer to investors 8,000 shares (\$112,000) of its treasury stock for the purpose of building a 100 TON DAILY CAPACITY COKE IRON FURNACE at Bluffton, and for such other improvements and purchase of other unimproved real estate as may be considered by the directors for the best interests of the stockholders. This stock is now paying six per cent. from ore shipments, and for the past three weeks we have netted over \$20,000 from the sale of our city property—a sale which is larger by 20 per cent. than our estimate.

Only 8,000 shares will be sold at this price, \$14.00. As soon as this block is sold, which will probably be consummated inside of thirty days, the price will be advanced to \$20.00 per share. The balance left in the Treasury after this sale will probably not be offered less than par, if at all. Judging from present indications, it will not be necessary to sell more than the present block, as receipts from ore shipments and sales of real

estate will be ample to complete the furnace and make all improvements now contemplated.

Such a safe investment has never been offered—a dividend paying stock for less than par. Absolutely safe—cannot be assessed. Fully paid up in the organization. Work will be commenced on the furnace as soon as \$30,000 is subscribed on this sale. Persons desiring to purchase larger blocks than their present means will permit, can make a payment of one-half of the amount desired, the balance to be paid in thirty days. Blanks for subscription will be furnished from this office direct.

Orders will be filled in rotation for 1, 5, 10, 50, 100 or 1,000 shares till the entire block is sold. Positively only 8,000 shares will be sold at the above-named price. Subscriptions can be made direct to this office, or to any of the company's agents here or in New York, Chicago, Boston and Bangor, Maine. Remittances can be made by New York draft, express money order, or by currency by registered letter. We can furnish the highest testimonials in regard to this property from business men and experts who have visited it from all parts of the Union.

SEND FOR PROSPECTUS. ADDRESS

## Bluffton Land, Ore & Furnace Company, Bluffton, Ala.



Ex-Mayor ABRAM S. HEWITT, of New York, says this section of Alabama "is the only place upon the North American Continent where it is possible to make iron in competition with the cheap iron of England."

## BUSINESS POINTS

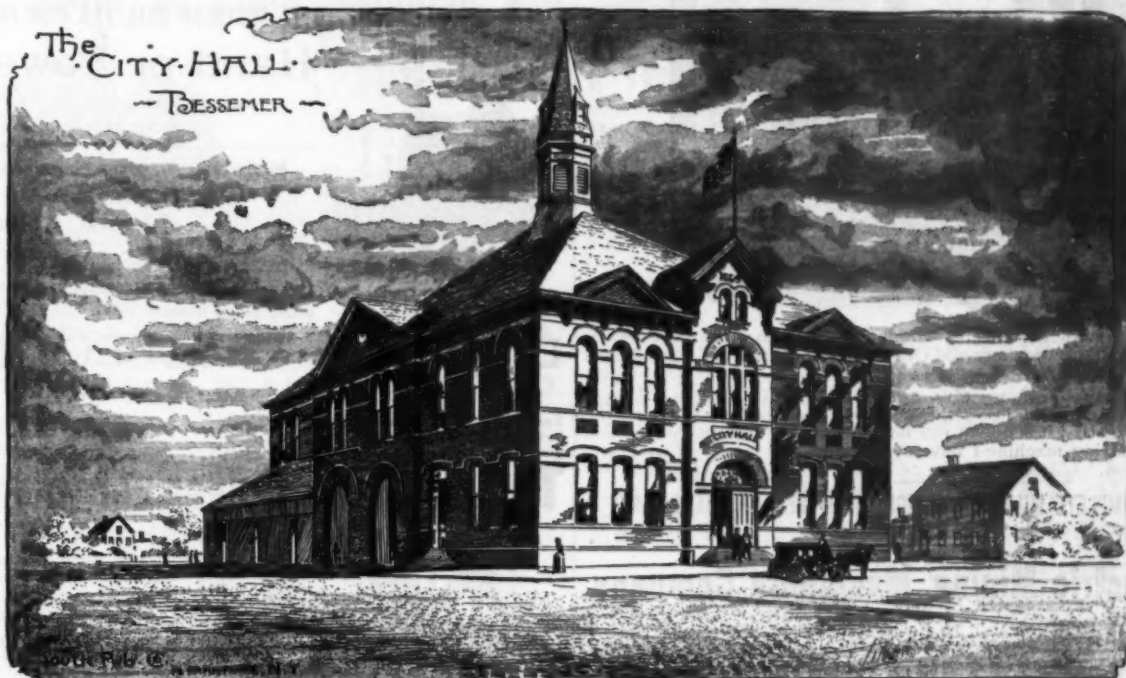
ABOUT

# BESSEMER CITY, ALA.

WORTH CONSIDERING BY BUSINESS MEN.

### COTTON MANUFACTURING.

With the Cotton growing near the mill; at the present cost of spindles in position; spacious sites costing nothing; coal delivered to mills at \$1.25 per ton; modern steam machinery with its minimum consumption of fuel, Bessemer offers marked advantages.



**100 Fruit, Truck and Dairy Farms.**  
The Land Company offers on leases for five or ten years, with very liberal terms, One Hundred Farms, 5, 10 and 15 Acres each, and will erect cottages and put up fencing; but only to parties who have, by experience, been successful in these branches of business. Don't wait any inexperienced experimenters on any terms.

## Bessemer's Iron Foundations.

**First.—The DeBardeleben Coal & Iron Company**—Two furnaces in blast; two batteries of 170 coke ovens each—340. Extensive coal and iron mines, limestone rock, etc., in active operation. Furnaces situated within the city limits, occupying 160 acres of land—enough for multiplied extensions. Average output 225 tons daily.

**Second.—The Bessemer Steel & Iron Company**—Two furnaces go in blast December, 1889; two batteries of 200 coke ovens each. Extensive coal and iron mines, limestone rock, etc., in active operation. Furnaces situated within the city limits, occupying 100 acres of land—enough for multiplied extensions. Average output 225 tons daily.

**Third.—The Little Belle Iron Company**—To go in blast December, 1889. One charcoal furnace, situated within the city limits, occupying 50 acres of land, enough for multiplied extensions. Average output 60 tons daily.

**Fourth.—The Bessemer Rolling Mills**—Situated within the city limits, occupying 13 acres of land. When running full works 700 hands. One hundred tons possible daily output.

**Fifth.**—In addition to the coal and iron mines above referred to, in connection with the five furnaces, these proprietors own the **MAGNETIC ORE LAND COMPANY**. The total coal, iron and limestone lands owned by these corporations amount to over

**200,000 ACRES.**

The **EARLIEST SELECTED** and choicest lands in Alabama, all directly tributary to the City of Bessemer, representing, with furnaces, rolling mills, etc., an aggregate of \$3,000,000, not including other lines of business.

Iron Manufacturers in Bessemer will have a direct advantage of \$2.50 to \$3 per ton on the cost of Pig Iron, compared with Pennsylvania Prices.

## TRANSPORTATION EVERYWHERE UNEXCELLED.

The Queen & Crescent Line—Cincinnati to New Orleans.

The Louisville & Nashville Lines.

The Georgia Pacific and Danville Lines.

The Kansas City, Memphis & Birmingham Line.

The Birmingham & Bessemer Railroad runs trains every hour to Birmingham.

The Bessemer & Huntsville is completed as far as Chepultepec.

The Bessemer & Tuscaloosa is completed to Woodstock, a distance of thirty miles, lacking only eighteen miles of reaching Tuscaloosa.

The Bessemer & Selma has been surveyed and grading will soon commence.

The Mobile & Bessemer, an extension of the East Tennessee, Virginia & Georgia, is in process of rapid construction.

The Sheffield & Bessemer is projected to Bessemer. It is now built as far as Jasper, forty miles northwest.

The Birmingham, Powderly & Bessemer Street Railway, Bessemer to Birmingham, will be running by November 1st, half the line being now graded.

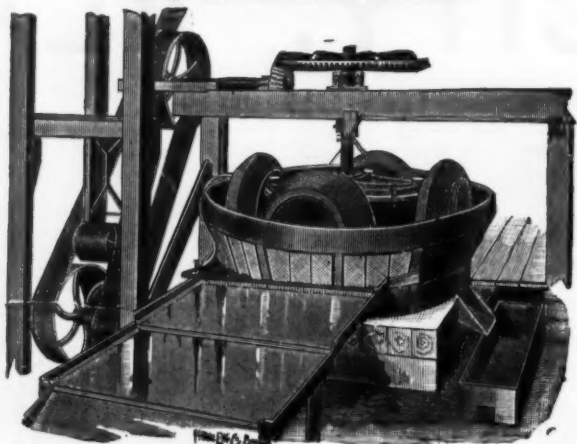
**WOOD-WORKING INDUSTRIES**—The primeval forests of Alabama, tributary to Bessemer, offer manifold attractions to Wood-Working Manufacturers.

**CORRESPONDENCE SOLICITED.** For particular information as to price of lots, manufacturing sites and inducements to establishing plants in this unrivalled locality, address

H. M. McNUTT, Secretary.

*H. M. McNutt*  
President

## WISWELL Ore Pulverizer and Amalgamator COMBINED.



The following testimonial from Mr. Marsden, of the firm of Farrel & Marsden, manufacturers of Stone Breakers and Ore Crushers, Ansonia, Conn., speaks volumes for the Wiswell Mill:

Wiswell Electric Mining Machinery Co.:

GENTLEMEN—After carefully inspecting your mill and seeing it in operation, I do not hesitate to say that it is one of the best, if not the best pulverizer and most complete gold-saving machine I have ever seen. Please accept congratulations for your success.

S. L. MARSDEN.

WE FURNISH A COMPLETE MILL FOR \$2,500, DELIVERED ON BOARD CARS.

FOR FURTHER INFORMATION ADDRESS

**Wiswell Electric Mining Machinery Company,**  
4 POSTOFFICE SQUARE,  
A. A. REEVE, Treasurer. BOSTON, MASS.

BUY THE BEST.

## Bullock's Diamond Prospecting Core Drills,

For Surface or Underground Prospecting.

The Only Drills that will give an Accurate Record of every Strata Penetrated.

ALL DRILLS SOLD WITHOUT RESTRICTIONS.

**Lane's Band Friction Hoisting Machinery**

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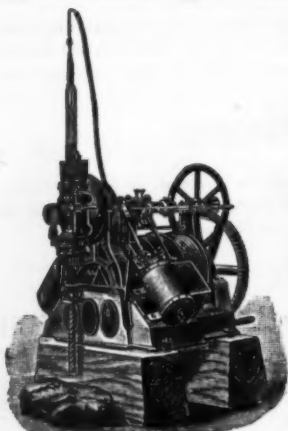
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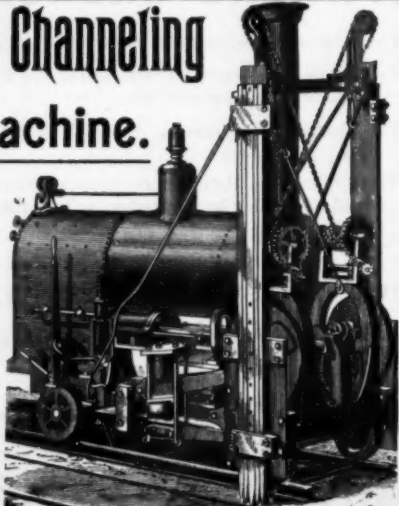


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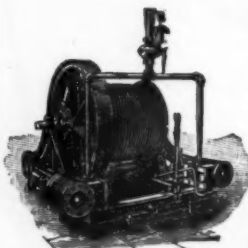


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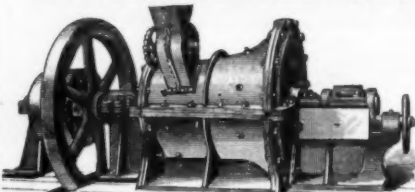
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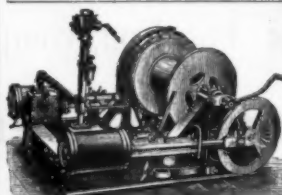
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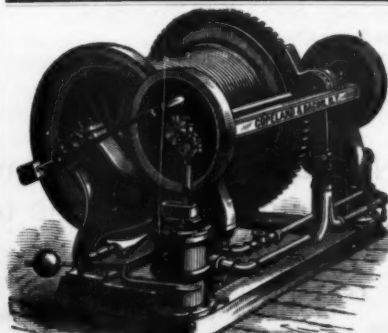
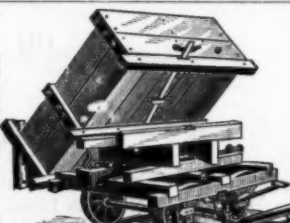


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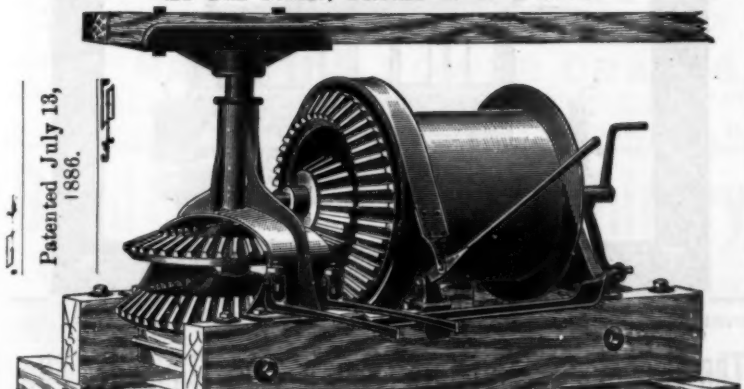
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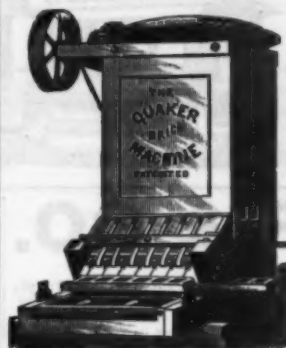
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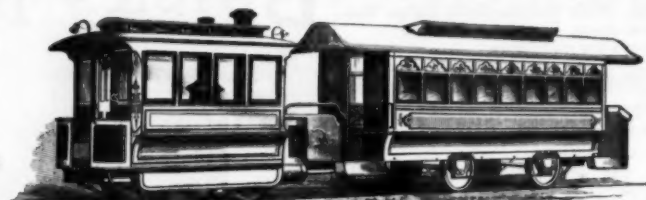
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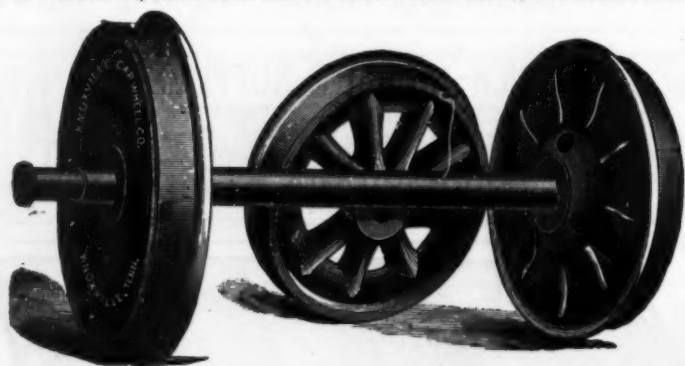
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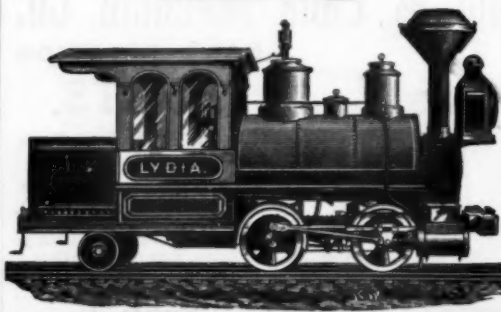
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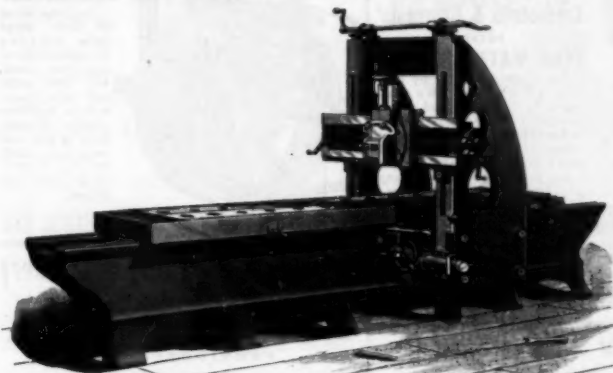
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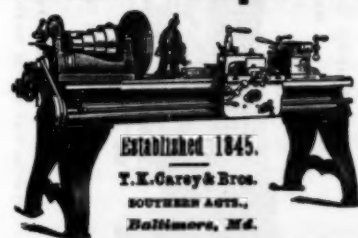
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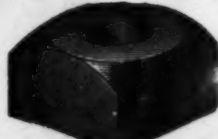
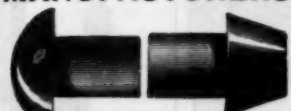
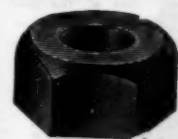
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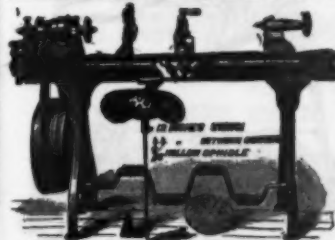
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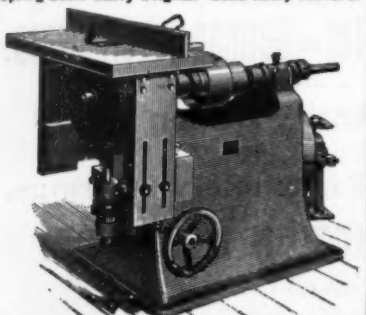
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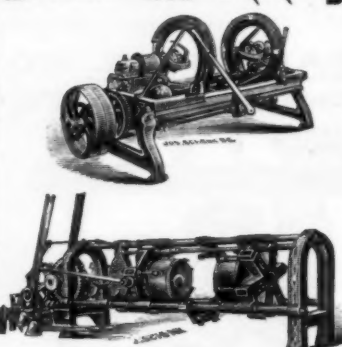
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Brass & Plated for Engine use.  
ALL IRON for Line Shafting.  
With Patent Cut-Off for Regulating Flow of Grease.  
For Sale by **THOS. K. CAREY & CO., Baltimore, Md.**

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Taper-Sleeve Wood  
Belt Pulleys, Adjustable  
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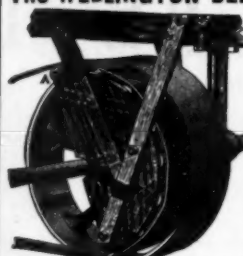
Couplings, Wood  
Pulleys in Halves,  
Taper-Sleeve and  
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Shafting, Post  
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Friction-Clutch Pulley.

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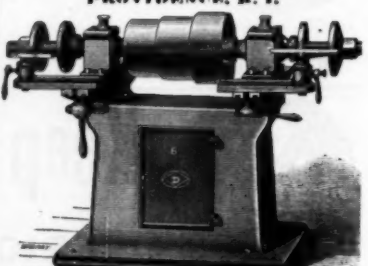
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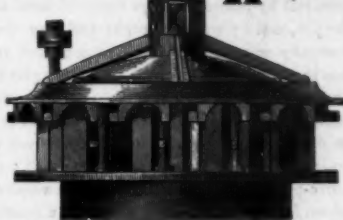
The demand for manganese ores exceeds the present supply. Since April 1st three large cargoes have arrived at this port and been transferred to railroad cars for transportation to Pittsburgh. One was from Macri, Asia Minor; the second from Piequimbo, Chili; the third from Carthage, Spain. Thus it will be seen that Europe, Asia and South America are drawn upon to supply this ore, for which there is an ever-increasing demand, because American steel-rail manufacturers prefer to use this ore when they can get it of sufficient purity instead of purchasing foreign spiegel, as is the custom of their British competitors. There are very few mines in the country that furnish ore of the required quality, the chief one being in Augusta county, Virginia. This mine pays monthly cash dividends to its stockholders. At the same time there are half a dozen steel-rail companies in the country eager to buy, and with money enough to purchase any property whose ores equal in quantity and quality those of the Augusta county mine.

It is a fact, both interesting and suggestive, that the Asia Minor deposit lies in the mountains some twenty miles from the coast, from whence the ores are conveyed to the seaport in sacks on the backs of camels and donkeys. If, with this mode of transportation and the long sea voyage thereafter, it pays to mine these ores, how much greater would be the profits of American mines producing ores of approximate purity. American experts have informed the MANUFACTURERS' RECORD that many persons have been led to believe that they had valuable deposits of manganese on their properties by the analysis made by those who lacked experience, and they assert that there is only one analyst in this country whose certificates are accepted by purchasers of manganese.

We are requested by Mr. W. Ashton Pringle, Jr., to say that "The Simonds National Bank, of Sumter, S. C.," is presided over by Vice-president and Manager Robert M. Wallace, with W. Ashton Pringle, Jr., cashier.

A FOUR horse-power tubular boiler and engine, nearly new, is offered for sale in our advertising columns by the Chesapeake Belting Co., of Baltimore. It is as good as new, and having run perfectly, the purchaser is assured of a good bargain, especially as it is offered at a great reduction over the cost price.

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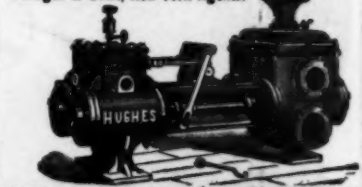
NEW AND IMPROVED HOT BLAST CUPOLA, (patent March, 1884), and New Smokeless and Automatic Feed Boiler (pat. 1886, in U. S.) Co. correspondence solicited for plans of foundries and the economical working of cupolas, the saving of fuel in melting iron and steel, and in the production of steam. Address VICTOR COLLIAU, Mechanical Engineer and Architect, 287 Jefferson Avenue, Detroit, Mich.

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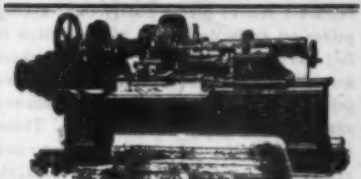
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## THE MARKETS.

OFFICE MANUFACTURERS' RECORD,  
BALTIMORE, August 21, 1889.

All our reports from the South are uniformly favorable. Crop prospects indicate the heaviest yield of corn and cotton ever made in this section; railroad building is more active than in any other part of the country; manufacturers are running full time, with orders well ahead as a general thing, and the heavy profits that are being made in all industrial lines are being reinvested in new enterprises. The outlook in the South can scarcely be described as less than brilliant.

The past week has not presented any new or strange features in iron or steel. There has been an even, steady demand for all products in all markets. Everywhere trade and manufacturing prospects are spoken of in the strongest terms. Manufacturers realize pretty nearly their asking prices on early deliveries. Competition is felt less than for months. Pig iron makers are selling their full output for remunerative prices. Throughout the iron trade there are symptoms of an upward tendency. There is trouble in the coke regions, and no one can tell the outcome. In Eastern Pennsylvania the coal managers have tried twice to make an advance, but market conditions are against them just at present. Here and there wages are advanced. The immense production of the past six months in crude iron gave the country only a slight increase in stocks. The heavy demand of the past month has started production on the increase, and besides, has hardened prices a little. Southern furnace interests show up well. Enormous deliveries continue to be made at many Western points. Prices as a rule are maintained at outside figures, and a further advance is within reach, it is believed. As to this it is hard to say. The country possibly may call for a much heavier supply of iron during the coming 12 months than is at present thought probable. Railroad building requirements are likely to spring up at any time. The government will continue to be a large buyer of material, or rather the contractors of its war ships. The repairs on railway tracks are calling for enormous stocks of track supplies, and most mills are crowded with orders. Makers of machinery are also very busy. Car builders have been making extensive purchases. The Pennsylvania Company has just ordered an additional one thousand cars and other trunk lines will soon be in the market. The Huntingdon interests are now placing extensive machinery contracts in Philadelphia to equip their large ship-yard near Newport News. The lake ship and boat yards are also quite well supplied with business for the next four months. New pipe lines are also projected that will keep skelp and wrought iron pipe mills crowded for some time to come.

All our advices from iron-making centers are favorable. There is no dullness; prices are firm; orders are pressing. No multiplication of words will make the situation better understood. Prices all over the West continue firm. Chicago's business is increasing, especially in heavy hardware and farming supplies. At St. Louis there is a general activity in all lines of mill and furnace products. A healthy condition of things exists all through the Ohio Valley, and manufacturers feel that it is safe to expand capacity. Tools and implements are distributed without the least friction as to prices or payments. Enterprise is feeling its way conservatively.

Pig-iron production has once more begun to climb and will probably continue in an upward direction to the close of the year. The bar-iron makers are now filled up with business and there is no reason for apprehending any diminution in activity. The demand for steel billets and slabs is unusual. Bessemer pig has also moved up a peg.

Nails sell well everywhere. Both cut and wire meet with an excellent demand.

Ship builders speak of an excellent outlook. Authorities in the iron trade believe there will be a general expansion of demand next year, especially if the country should return to active railroad building.

## HARDWARE.

Orders are beginning to come in more freely as the fall season approaches. The large jobbers are busy. Reports from the interior are encouraging and the volume of trade will be good. Prices remain very firm generally, although some few goods are still very weak, such as wire nails, strap and T hinges, etc. The manufacturers of the latter are demoralized and are selling in some cases, it is said, at less than cost. Screws are selling more freely, and reports of low prices from the jobbers are becoming less frequent. Bar iron is somewhat stiffer and hopes are entertained that higher prices will prevail.

A 30-MILE IRRIGATING CANAL—EL PASO, TEX., Aug. 12, 1889.—The El Paso Irrigation Co. proposes to dig a canal about thirty miles long, to irrigate fifty or sixty thousand acres of the Rio Grande valley immediately below El Paso. ERNEST E. RUSSELL.

BIG INDUCEMENTS TO SECURE ANOTHER FURNACE FOR NEW BIRMINGHAM—RUSK, TEXAS, August 12, 1889.—I have made a proposition in writing to the Phoenix Furnace & Land Co., donating nine acres of land and 117 town lots, out of my first addition to New Birmingham, in consideration of the construction and operation of a 50-ton iron blast furnace on the said nine acres. This land lies immediately between the town of Rusk and New Birmingham, and is counted, for water and railroad facilities and accessibility to ore, unequalled. The P. F. & L. Co. levied a subsidy on this place, Rusk, and New Birmingham—Rusk, \$7,000, which has been raised; New Birmingham voluntarily donated \$25,000 of stock of the New Birmingham Cherokee Land & Iron Co., and 25 years' ore privilege; the Kansas & Texas Addition to New Birmingham gave thirty lots of their property; the Forest Addition gave twenty-five lots of their property. The estimated value of the stock, mining and land, donated at present prices is valued at \$70,000. The P. F. & L. Co. has accepted the proposition, and will begin work within thirty days.

E. C. DICKINSON.

CONTRACTORS' WORK AT LAREDO—LAREDO, TEXAS, August 15, 1889.—The city is about to build a wrought iron bridge, consisting of three 115 foot spans across the Chacon creek in the limits of Laredo. Bids will be received up to Sept. 17, and information can be obtained from Hon. J. M. Rodriguez, county judge, Laredo, Texas. Bids are solicited on the erection of four two-story brick buildings, with iron and plate-glass fronts. Information can be obtained from James Murphy, architect, Laredo, Texas. The Mexican National Railroad Co. are sinking artesian well in New Laredo on the opposite side of the river. It is stated that the Mexican National Railroad will lay a third rail from Laredo to Monterey, a distance of 170 miles. This will enable the broad gauge cars of the Monterey, Tampico & Gulf Road to come direct to Laredo. The municipality of New Laredo is, it is stated, about to erect handsome buildings for the use of the city council. As a great deal of the material will be brought from the United States, it may be to the interests of some of the American contractors to communicate with the mayor of New Laredo.

WM. OLIVER.

On the afternoon of August 3d the Taper-Sleeve Pulley Works, of Erie, Pa., received an order for a new wooden driving wheel, to take the place of a large broken iron one. Work had to be commenced at the lumber pile, but by putting a large force of men at the job, and by working night and day, the company was able to complete the work in less than one week after the order was given, and have the new wheel in position and running. The wheel measures 168 inches in diameter (14 feet), 42 inch face, drives a 40-inch belt, and is required to transmit 500 horse-power. The substitution of the wooden wheel for the iron one eliminates the element of danger which constantly attends all large revolving bodies of metal, owing to possible flaws in the casting and to their great weight, and consequent tendency to fly apart. The main receiving pulley at the same place, 84 inches in diameter and taking the 40-inch belt direct from the engine driver, was built by the Taper-Sleeve Pulley Works Company, and has been doing constant and satisfactory work during the past five years.

## Information Wanted.

BENNETTSVILLE, S. C., August 17, 1889.  
Editor Manufacturers' Record:

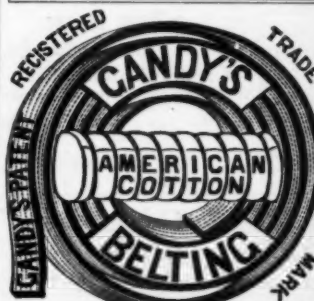
Kindly furnish us at once with the names and addresses of manufacturers of both jute and cotton bags for fertilizers, and of manufacturers of best press cloths for cotton oil mills, both camel's hair cloths and others. We want to communicate also with persons who can sell us chemicals, and give us best formulas for fertilizers. Good brokers in acid phosphates and other ingredients may be able to aid us.

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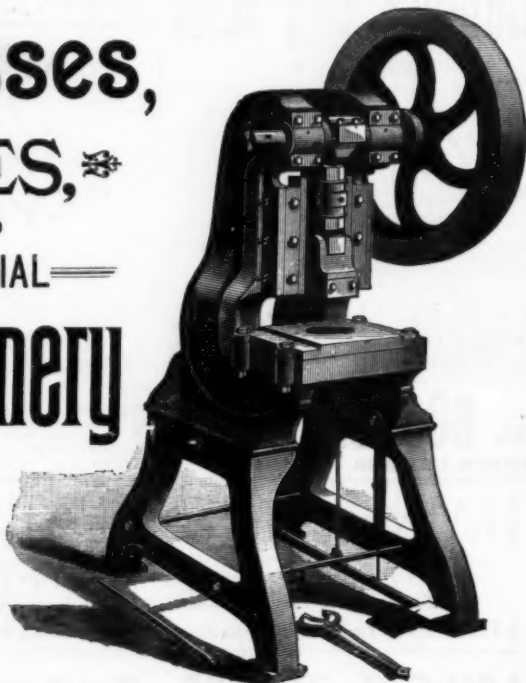
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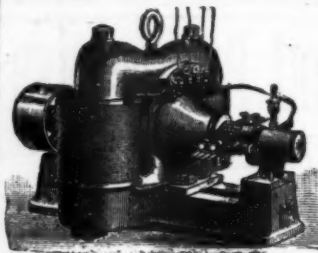
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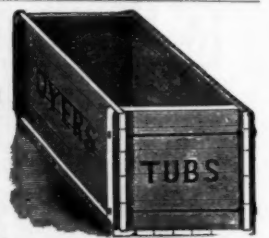


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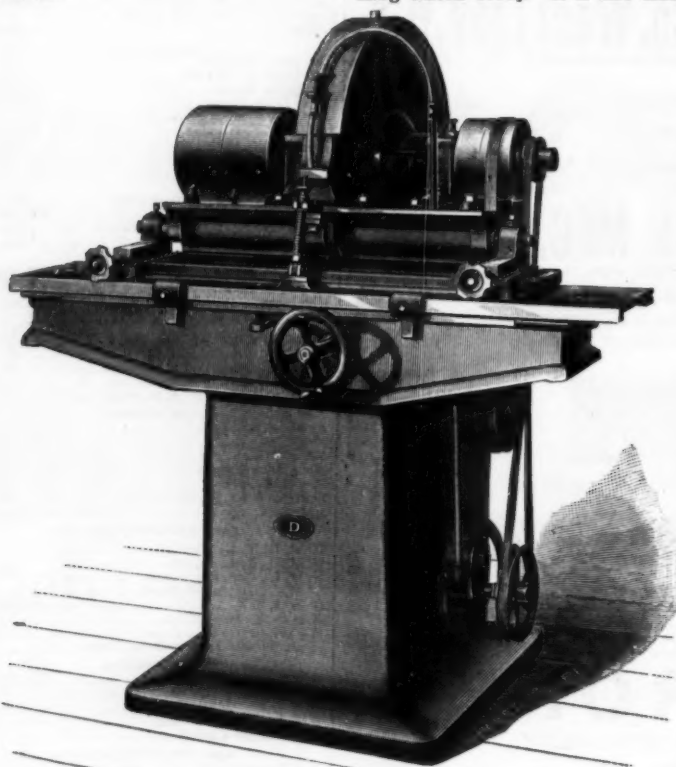
Cast Iron, Fast Joint.....

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Cast Iron, Fast Joint.....

**Knife-Grinding Machine.**

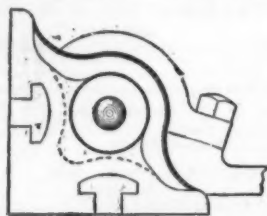
The machine illustrated is a late production in the line of labor-saving grinding machinery. It is designed to grind knives or any other work up to 30 inches long. It has automatic power feed, both longitudinal and lateral, so arranged by a specially patented device. The angle iron, on which the platen or table to which the knife or work to be ground is clamped, can be reversed so that the workman can grind to or from the edge as he wishes; also directly across the edge or square face if desired.



KNIFE GRINDING MACHINE.

The platen or table is exceptionally wide and furnished with extra width of ways to traverse upon. It is also provided with small hand wheels at each end, to bring the work to be ground to the wheel on a parallel line, then to retain its parallel lines.

There is an automatic device for feeding the emery wheel forward to the work as it is ground away; it can also be operated by hand movement when desired. The center of the angle of knife bar is enclosed by a split yoke, as shown in the small detail cut. By loosening the yoke screw the workman is able to swivel the



SECTIONAL VIEW.

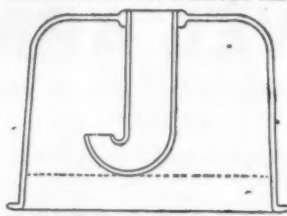
angle iron to any desired position or pitch to the wheel. This feature is one of the particularly strong points of this grinder, and cannot help commending itself to the workman. Long engine lathe boxes are provided, which can be readily replaced when worn, an especially good feature with this machine, making it, it is claimed, very strong and durable, being made as thoroughly throughout as the best make of lathes and planers. Also, every provision known for excluding the emery dust from the bearings has been provided. The water hood is so arranged that all water is distributed directly on the wheel in front of the knife or work to be ground, and thus prevents drawing the temper. The

inside hood leads all water and spray directly back to the upper tank. This tank is provided with a patent siphon, as shown in small cut, patents for which were allowed May 7, 1889. This device avoids taking any of the emery and other sediment that comes from the wheel and work to the lower tank. The pump that takes the water from this tank to the wheel is being made on a new principle, entirely of brass, which will not become corroded or clogged up with rust from prolonged use.

The machine weighs complete, as shown for 30 inch knife grinding, 1,100 pounds, using wheels 22x14. It is also made in

five other sizes, taking work up to 100 inches.

Any other information can be had of the manufacturers, the Diamond Machine



SECTIONAL VIEW.

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ALLIANCE COTTON-SEED OIL MILL.  
W. M. HAIG, Secy.

**DEVELOPING MANGANESE**—WASHINGTON, D. C., August 17, 1889.—Gen. W. S. Rosecrans, president of the "Eureka Manganese Co.," requests me to advise you that the above company was organized under the laws of Virginia on the 16th ult. with a capital of \$500,000, and has commenced work on its property near Markville, Page county, Virginia, Shenandoah Valley Railroad.

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An Erie Engine, 22 horse-power, and Tubular Boiler, 20 horse-power, in good order and ready for work. Will be sold cheap for cash or exchanged for stock in any established enterprise, or for lots or property in or near any growing town. Address

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DARLINGTON LAND IMPROVEMENT CO.

Lots within the incorporate limits of the town of Darlington, and fine farming lands adjacent, for sale. Railroad facilities good. Fine graded school in town. For further particulars apply to J. J. WARD, President and Treasurer of Darlington Land Improvement Co., Darlington, S. C.

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12-ton ice plant (Pictet) all complete and in first-class order, can be had at one-third cost, and been in use only one year. For particulars inquire of

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Excellent opening.

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Pink, Blue, Green and Black Marble on property; also fine corundum property in North Georgia. For particulars address

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\$80 will buy the best BAND SAW in the world. \$100 will buy our new PATENT 40-inch BAND SAW. \$185 will buy our new PATENT BAND RESAWING MACHINE. \$125 will buy the best AUTOMATIC RIP SAWING MACHINE, weatherboarding attachments included, and one 12-inch RIP SAW.

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**Second Hand Machinery FOR SALE.**

One Egan Co., Universal Wood-worker. One Egan Co., Wheel Boxer. One J. A. Fay & Co., No. 8 Lightning Floorer.

The above machines are guaranteed to be practically as good as new. Address,

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WOOD-WORKING MACHINERY, full line, with latest improvements. Write for circulars and price-list. BENTEL, MAROEDANT & CO., HAMILTON, OHIO.

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one of the best located  
cities in the South.

Address, for full par-  
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One Van Winkle Press and Pump.  
Two Boomer Presses.

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TARBORO OIL MILLS, Tarboro, N. C.

Let us know what you want.  
We can save you some money.

NEW AND SECOND HAND  
MACHINERY,  
OF EVERY DESCRIPTION.

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Desiring a Staple Article on Royalty or Shop Right. For particulars of the "Lancaster Patent Steam and Hot Water Radiator" address EZRA F. LANDIS,  
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We have the following Machine Tools, taken mainly in exchange for those of our own manufacture. We will sell them low.

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- 1 12x6 Fitchburg Lathe. Good Order.
- 1 17x8 New Haven Lathe. Good Order.
- 1 17x8 Putnam Lathe. Good Order.
- 1 18x6 Gray Lathe. Good Order.
- 1 18x6 New Haven Lathe. Good Order.
- 1 18x8 George Baker Lathe. Good Order.
- 1 20x8 Ames Lathe. Good Order.
- 1 20x6 L. W. Pond Lathe. Good Order.
- 1 20x7 Conway Lathe. Good Order.
- 1 20x2x6 Pratt & Whitney Gap Turret Lathe. Good Order.
- 1 20x10 Fifield Lathe. New.
- 1 20x10 Ames Lathe. Good Order.
- 1 20x18 W. & L. Lathe. Good Order.
- 1 22x22 Niles Shaping Lathe, with chuck and 3 tool shafting rest and shaft straightener Good Order.
- 1 60-in. Stevens Lathe. New.
- 1 30x15 Wood & Light Lathe. Good Order.

**PLANERS.**

- 1 12-in. W. & L. Shaper Traveling Head. Good Order.
- 1 10-in. New Haven Shaper. Good Order.
- 1 15-in. Hendey Shaper. Good Order.
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- 1 Planer, 18-in. crank, N. Y. S. Eng. Co. Good Order.
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- 30 in. S. H. Blaisdell Drill. Good Order.
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- No. 3 C. & C. Pipe Cutter. New.
- No. 4 Garvin Miller. Nearly New.
- No. 4 Garvin Miller. New.
- No. 4 Garvin Miller with B. G. New.
- Single Punch and Shears, 1/2 hole and 3/4 iron.
- Double Punch and Shears, 1/2 hole and 3/4 iron.

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Complete estimates made on outfits.

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Manufacturers of Engine Lathes, Shapers, Upright Drills, etc. Dealers in Iron and Brass Working Machinery.

**FOUR HORSE-POWER****Upright Tubular Boiler Engine****COMBINED.**

Nearly new. Will be sold cheap. Apply to or address **CHESAPEAKE BELTING CO.,** Baltimore, Md.

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Almost new Scotch Boiler; six feet diameter and eight feet long, built of best steel plates, inspected by U. S. Inspector; 64 inch return tubes; suitable for marine or stationary purposes. For further particulars apply to

**GUGGENHEIMER, WEIL & CO.,**  
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**For Sale.**

**BOILERS.**  
41 Second-Hand and 23 New Boilers,  
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**ENGINES.**  
At buyers' prices. Address  
**CASEY BOILER MFG. CO. Chattanooga, Tenn.**

**FOR FIRST-CLASS****BOILERS,**

Tanks, Stacks, Tubes, Engines, Gins,  
Mills, Injectors, Shafting, Pul-  
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At **BOTTOM PRICES,**  
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**GEO. R. LOMBARD & CO.**  
AUGUSTA, GA.

Don't fail to write to us before you buy.

**FOR SALE CHEAP.**

One **BEMENT PLANER**, 42x42"  
x17 feet. Two heads on beam with  
power feeds. One Side Head with  
hand feed. Beam has vertical auto-  
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One **SELLERS PLANER**, 38"x36"  
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NEY PLANER**, 20"x20"x5 feet.  
The above being replaced with Open  
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**DETRICK & HARVEY, Baltimore, Md.**

**FOR SALE.**

- 1 Plate Planer.
- 1 12-in. Bement Slotter.
- 1 24-in. Double Lathe, 18 ft. bed; two heads, etc.
- 1 24-in. Lathe.
- 1 34-in. Double Driving Wheel Lathe. F. B. Miles make.
- 1 42x48-in. Planer to plane 18 ft. long, with two heads on cross-rail. Miles make.
- 1 52x54-in. Planer to plane 20 ft. long, with two heads on cross-rail. Miles make. Address

**NILES TOOL WORKS,**  
HAMILTON, OHIO.

**Second-Hand Tools****FOR SALE.**

- Iron Planer, to plane 36x36 inches x 10 ft. .... \$450
- Screw-Cutting Lathe, 30 inch x 10 1/2 ft., triple geared. .... 650
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- Hendey Shaper, 24 inch stroke. .... 375
- Farrel Safe, inside measure 17 1/2 x 22 inches. .... 75

**EDWIN HARRINGTON, SON & CO.**

15th & Penna. Ave., Philadelphia.

**SECOND-HAND MACHINERY.**

- 1 Iron Planer, planes 22 feet, 48x24, double heads.
- 1 " " " " 20x10, 12 ft. bed.
- 1 " " " " 18x10, 12 ft. bed.
- 1 " " " " 16x10, 12 ft. bed.
- 1 " " " " 14x10, 12 ft. bed.
- 1 " " " " 12x10, 12 ft. bed.
- 1 " " " " 10x10, 12 ft. bed.
- 1 " " " " 8x10, 12 ft. bed.
- 1 " " " " 6x10, 12 ft. bed.
- 1 " " " " 4x10, 12 ft. bed.
- 1 " " " " 2x10, 12 ft. bed.
- 1 " " " " 1x10, 12 ft. bed.
- 1 " " " " 1/2x10, 12 ft. bed.
- 1 " " " " 1/4x10, 12 ft. bed.
- 1 " " " " 1/8x10, 12 ft. bed.
- 1 " " " " 1/16x10, 12 ft. bed.
- 1 " " " " 1/32x10, 12 ft. bed.
- 1 " " " " 1/64x10, 12 ft. bed.
- 1 " " " " 1/128x10, 12 ft. bed.
- 1 " " " " 1/256x10, 12 ft. bed.
- 1 " " " " 1/512x10, 12 ft. bed.
- 1 " " " " 1/1024x10, 12 ft. bed.
- 1 " " " " 1/2048x10, 12 ft. bed.
- 1 " " " " 1/4096x10, 12 ft. bed.
- 1 " " " " 1/8192x10, 12 ft. bed.
- 1 " " " " 1/16384x10, 12 ft. bed.
- 1 " " " " 1/32768x10, 12 ft. bed.
- 1 " " " " 1/65536x10, 12 ft. bed.
- 1 " " " " 1/131072x10, 12 ft. bed.
- 1 " " " " 1/262144x10, 12 ft. bed.
- 1 " " " " 1/524288x10, 12 ft. bed.
- 1 " " " " 1/1048576x10, 12 ft. bed.
- 1 " " " " 1/2097152x10, 12 ft. bed.
- 1 " " " " 1/4194304x10, 12 ft. bed.
- 1 " " " " 1/8388608x10, 12 ft. bed.
- 1 " " " " 1/16777216x10, 12 ft. bed.
- 1 " " " " 1/33554432x10, 12 ft. bed.
- 1 " " " " 1/67108864x10, 12 ft. bed.
- 1 " " " " 1/134217728x10, 12 ft. bed.
- 1 " " " " 1/268435456x10, 12 ft. bed.
- 1 " " " " 1/536870912x10, 12 ft. bed.
- 1 " " " " 1/1073741824x10, 12 ft. bed.
- 1 " " " " 1/2147483648x10, 12 ft. bed.
- 1 " " " " 1/4294967296x10, 12 ft. bed.
- 1 " " " " 1/8589934592x10, 12 ft. bed.
- 1 " " " " 1/17179869184x10, 12 ft. bed.
- 1 " " " " 1/34359738368x10, 12 ft. bed.
- 1 " " " " 1/68719476736x10, 12 ft. bed.
- 1 " " " " 1/137438953472x10, 12 ft. bed.
- 1 " " " " 1/274877907344x10, 12 ft. bed.
- 1 " " " " 1/549755814688x10, 12 ft. bed.
- 1 " " " " 1/1099511629376x10, 12 ft. bed.
- 1 " " " " 1/2199023258752x10, 12 ft. bed.
- 1 " " " " 1/4398046517504x10, 12 ft. bed.
- 1 " " " " 1/8796093035008x10, 12 ft. bed.
- 1 " " " " 1/17592186070016x10, 12 ft. bed.
- 1 " " " " 1/35184372140032x10, 12 ft. bed.
- 1 " " " " 1/70368744280064x10, 12 ft. bed.
- 1 " " " " 1/140737488560128x10, 12 ft. bed.
- 1 " " " " 1/281474977120256x10, 12 ft. bed.
- 1 " " " " 1/562949954240512x10, 12 ft. bed.
- 1 " " " " 1/1125899908481024x10, 12 ft. bed.
- 1 " " " " 1/2251799816962048x10, 12 ft. bed.
- 1 " " " " 1/4503599633924096x10, 12 ft. bed.
- 1 " " " " 1/9007199267848192x10, 12 ft. bed.
- 1 " " " " 1/18014398535696384x10, 12 ft. bed.
- 1 " " " " 1/36028797071392768x10, 12 ft. bed.
- 1 " " " " 1/72057594142785536x10, 12 ft. bed.
- 1 " " " " 1/144115188285571072x10, 12 ft. bed.
- 1 " " " " 1/288230376571142144x10, 12 ft. bed.
- 1 " " " " 1/576460753142284288x10, 12 ft. bed.
- 1 " " " " 1/1152921506284568576x10, 12 ft. bed.
- 1 " " " " 1/2305843012569137152x10, 12 ft. bed.
- 1 " " " " 1/4611686025138274304x10, 12 ft. bed.
- 1 " " " " 1/9223372050276548608x10, 12 ft. bed.
- 1 " " " " 1/18446744100553097216x10, 12 ft. bed.
- 1 " " " " 1/36893488201106194432x10, 12 ft. bed.
- 1 " " " " 1/73786976402212388864x10, 12 ft. bed.
- 1 " " " " 1/14757395280442477728x10, 12 ft. bed.
- 1 " " " " 1/29514790560884955456x10, 12 ft. bed.
- 1 " " " " 1/59029581121769910912x10, 12 ft. bed.
- 1 " " " " 1/118059162243539821824x10, 12 ft. bed.
- 1 " " " " 1/236118324487079643648x10, 12 ft. bed.
- 1 " " " " 1/472236648974159287296x10, 12 ft. bed.
- 1 " " " " 1/944473297948318574592x10, 12 ft. bed.
- 1 " " " " 1/1888946595896637149184x10, 12 ft. bed.
- 1 " " " " 1/3777893191793274298368x10, 12 ft. bed.
- 1 " " " " 1/7555786383586548596736x10, 12 ft. bed.
- 1 " " " " 1/15111572767173097193472x10, 12 ft. bed.
- 1 " " " " 1/30223145534346194386944x10, 12 ft. bed.
- 1 " " " " 1/60446291068692388773888x10, 12 ft. bed.
- 1 " " " " 1/120892582137384777547776x10, 12 ft. bed.
- 1 " " " " 1/241785164274769555095552x10, 12 ft. bed.
- 1 " " " " 1/483570328549539110191104x10, 12 ft. bed.
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- 1 " " " " 1/247588008217364024417845248x10, 12 ft. bed.
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- 1 " " " " 1/990352032869456097671380992x10, 12 ft. bed.
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- 1 " " " " 1/3961408131477824390685523968x10, 12 ft. bed.
- 1 " " " " 1/7922816262955648781371047936x10, 12 ft. bed.
- 1 " " " " 1/15845632525911297562742095872x10, 12 ft. bed.
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- 1 " " " " 1/63382530103645190250968383488x10, 12 ft. bed.
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- 1 " " " " 1/1014120481658323044015494135808x10, 12 ft. bed.
- 1 " " " " 1/2028240963316646088030988271616x10, 12 ft. bed.
- 1 " " " " 1/4056481926633292176061976543232x10, 12 ft. bed.
- 1 " " " " 1/8112963853266584352123953086464x10, 12 ft. bed.
- 1 " " " " 1/16225927706533168704247906172928x10, 12 ft. bed.
- 1 " " " " 1/32451855413066337408495812345856x10, 12 ft. bed.
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- 1 " " " " 1/129807421652265349633983249834224x10, 12 ft. bed.
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- 1 " " " " 1/1038459373218122797071865998673792x10, 12 ft. bed.
- 1 " " " " 1/2076918746436245594143731997347584x10, 12 ft. bed.
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- 1 " " " " 1/68056473483222895628901809269885632512x10, 12 ft. bed.
- 1 " " " " 1/136112946966445791257803618539771265024x10, 12 ft. bed.
- 1 " " " " 1/272225893932891582515607237079542530048x10, 12 ft. bed.
- 1 " " " " 1/544451787865783165031214474159085060096x10, 12 ft. bed.
- 1 " " " " 1/1088903575731566330062428948318170120192x10, 12 ft. bed.
- 1 " " " " 1/2177807151463132660124857896636340240384x10, 12 ft. bed.
- 1 " " " " 1/4355614302926265320249715793272680480768x10, 12 ft. bed.
- 1 " " " " 1/8711228605852530640499431586545360961536x10, 12 ft. bed.
- 1 " " " " 1/17422457211705061280998863173090721923072x10, 12 ft. bed.
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- 1 " " " " 1/278759315387280980495821810769515507689152x10, 12 ft. bed.
- 1 " " " " 1/557518630774561960991643621539031015378304x10, 12 ft. bed.
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- 1 " " " " 1/22300745230982478439665744661561240061133216x10, 12 ft. bed.
- 1 " " " " 1/44601490461964956879331489323122480122266656x10, 12 ft. bed.
- 1 " " " " 1/89202980923929913758662978646244960244533312x10, 12 ft. bed.
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- 1 " " " " 1/23945242860874427711847370623223028590943171113910272x10, 12 ft. bed.
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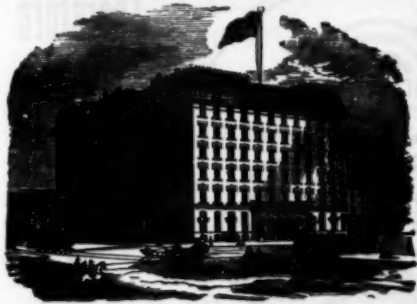
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## TRADE NOTES.

THE National Palley Covering Co., of Baltimore, have recently received from Evitt & Co., shoe manufacturers of that city, their fifth order for pulley covering. Their initial order placed over two years ago is still doing as good work as when first used, and their continued orders since prove the confidence they have in it.

THE firm of Colwell & Canning was lately dissolved and succeeded by Messrs. Reginald Canning & Co., who will carry on business in the same line, viz.: the furnishing of locomotives, cars, wheels, axles, etc., making a specialty of second-hand equipment of every description for both standard and narrow-gauge roads. Their address is 115 Broadway, New York.

THE officers of the Inman Line received a despatch yesterday announcing that the City of Paris had lowered the record again on her eastward passage, completed last night. The City of Paris passed Sandy Hook at 4 05 P. M. on Wednesday last. She was sighted off Fastnet Light at 6 P. M. yesterday, Greenwich time. Allowing 2 3/4 hours, the usual time, for her run to Roche's Point, her apparent time for the trip would be 6 days 4 hours and 40 minutes. Allowing 4 hours 56 minutes for the difference in time between New York and Greenwich, her actual time would be 5 days 23 hours and 44 minutes. The record was 6 days 29 minutes. The City of Paris's record westward (the best) is 5 days 23 hours and 7 minutes.—N. Y. Sun.

Commenting on the above the Magnolia Anti-Friction Metal Co., of New York, write us that this extraordinary speed can be attributed to the use of Magnolia metal in her journals, as this increases the motive power. This metal possesses very remarkable qualities and deserves a test by all steam users.

AN excellent specimen of a catalogue is that published by the Wainwright Manufacturing Co., of Massachusetts, to advertise their corrugated tube feed-water heaters, condensers, filters and work as general foundrymen and machinists. The popularity of the special product of the concern, the feed-water heaters, is well demonstrated by the fact that 60,000 horse-power of them are now in use. The leading characteristics in favor of the condensers of this company are an increase of heat in the feed-water, the decrease of power required to drive the air pump, the purity of the feed-water, resulting from the use of the water of condensation delivered from the condenser to the hot well—an invaluable feature where muddy or bad water are used—the use of thinner tubes, as they are strengthened by corrugation, and the surface area of the tubes thus increased, and the distribution of the metal so as to give the greatest strength with the least amount of weight. When it is considered that a condenser is an additional source of power, or to put it otherwise, a reducer of fuel consumption to the extent of from 20 to 30 per cent., its value will be appreciated by all economical people, and the good qualities of the products of this company appreciated. The Wainwright Co. also make filters, expansion joints, corrugated copper gaskets, grease extractors, gauges and cocks and other articles used about a boiler and steam engine. All these products are well described in the catalogue, which can be had by applying to the company at 34 Oliver street, Boston.

THE 22d annual publication of Poor's Manual of the Railroads of the United States is about to be issued. The introduction as a sort of prospectus is already in circulation. This manual is the leading publication upon the railway systems of the country and is authority on all subjects relating to railways. No one thing can be a

more accurate index of the growth and prosperity of a country, or of any part of a country, than the building of railways and the increase in the volume of business of the already established lines. In this manual all these statistics and all the information connected with them that would interest the close student are given. Carefully-arranged maps indicate the increased mileage and distinguish between the roads just built and those of several years' standing. A new feature recently introduced by the manual is the giving a history of leading lines. The present issue contains several such, the one of most interest to the South being that of the Louisville & Nashville. The whole story of the inception, growth and development of this line is given. It will do the heart of every true friend to the South good to read the story of the steady but wonderful growth of the Southern States as told in the statistics and reading matter in this volume. What adds to the interest and value of these statistics is a comparison with the statistics of preceding years. Any one seeking information of any sort in regard to railway matters will be sure to find it in this volume. Sent postpaid by H. V. & H. W. Poor, 70 Wall street, New York, on receipt of the price, \$6.

THE beauty of the catalogue issued by the Mather system of incandescent lighting is only typical of the light itself. Rarely has a catalogue come to us that was got up in better taste than this. This form of lighting is the most perfect yet conceived. There is no danger to life, and the risk from fire is reduced to a minimum; there is no overheating and burning the virtue out of the air; there is no flame; matches are not required, and there is no flicker of light or disagreeable smell. So much for the system in general. For the Mather system in particular, it has the advantage of having one of the most practical and skilled consulting electricians in the country in management. The system is therefore reduced to a fine point of science. The Mather dynamo is simplicity itself, hence it is hardly possible for the parts to get out of adjustment. It has perfect automatic regulation, so that the power consumed is in exact proportion to the number of lights in actual use. The lowest point of economy is thus reached, both in the construction and the operation of the dynamo. Another essential characteristic is the entire freedom from sparks without the use of any spark arrester or other such device. Much friction is thus saved, and the life of the parts is greatly prolonged. The choice of a lamp is as important a matter as the choice of a dynamo. The lamp used with the Mather system is the Perkins, the chief characteristics of which are its long life, its high efficiency at a minimum cost, and the freedom of the bulb from discoloration by use. This is an important feature, as oftentimes ten per cent. of the light is consumed by discolored bulbs. The company provides skilled experts to make surveys where lights are to be introduced, thus the best results are always secured. The high appreciation of the Mather system is well shown by the large number of leading factories, hotels, opera-houses, public institutions and other places in which it is used, a long list of which are given in the catalogue. The catalogue is a fine specimen of letter press work, and is sent out from the factory at Manchester, Conn.

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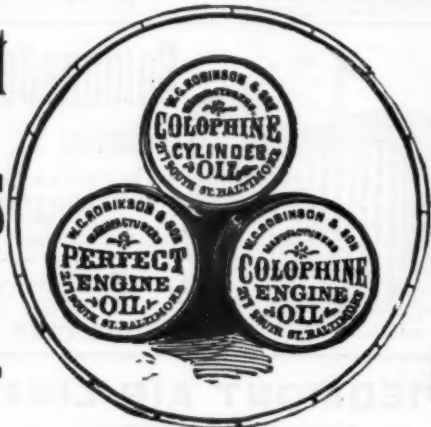
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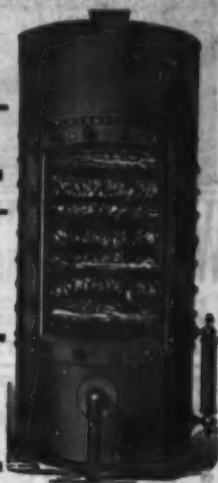
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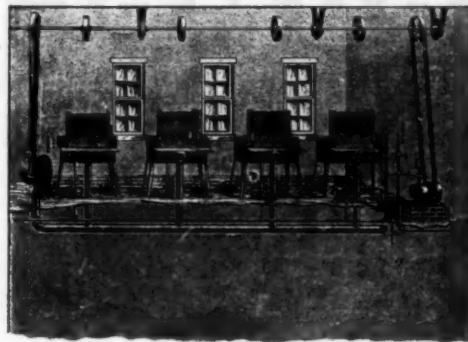
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THE SYSTEM adopted by this company for the use of Crude Petroleum as fuel is both simple, economical and effective. Perfect combustion, uniform heat, regulated as easily as an ordinary lamp. Although comparatively new, being only introduced in April of this year, the number of fires using it AMOUNT TO NEAR ONE THOUSAND, WHICH IS PROBABLY MORE THAN ALL THE OTHER DEVICES FOR THIS PURPOSE COMBINED.

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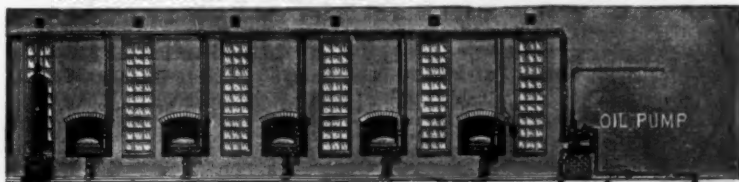
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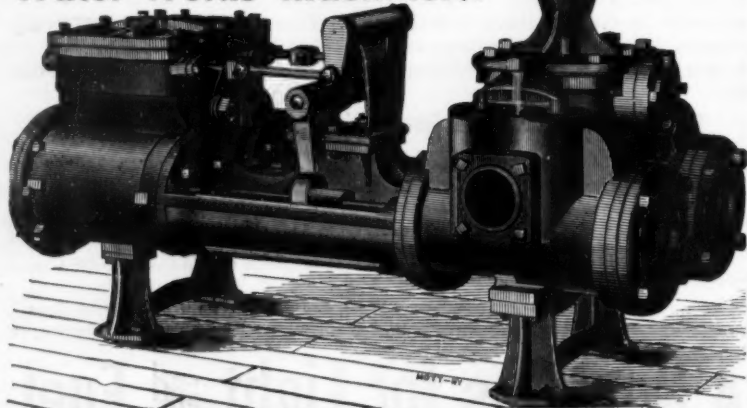
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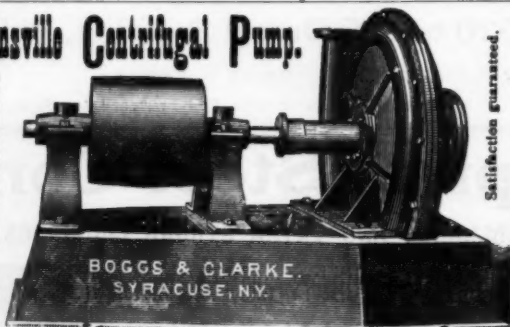
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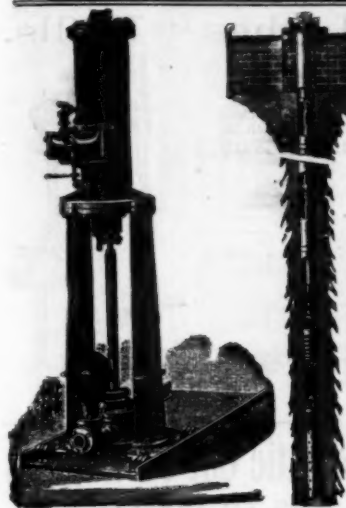
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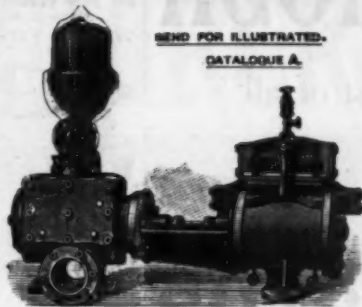




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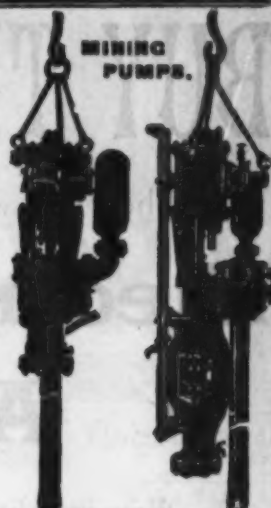


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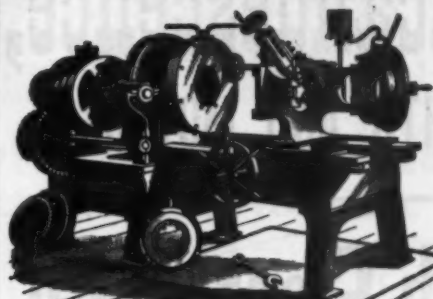
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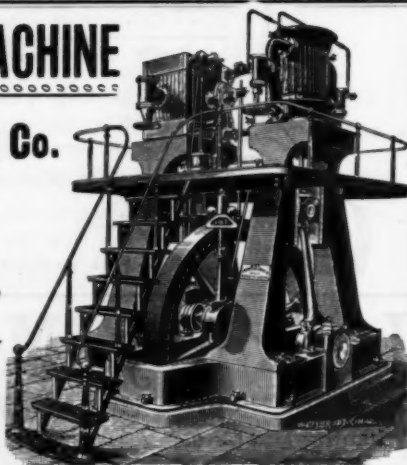
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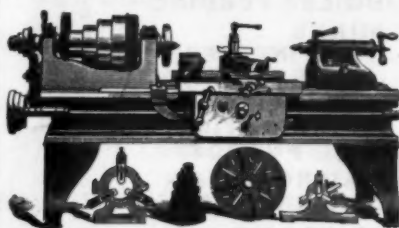
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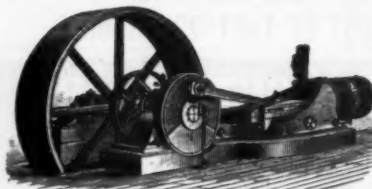
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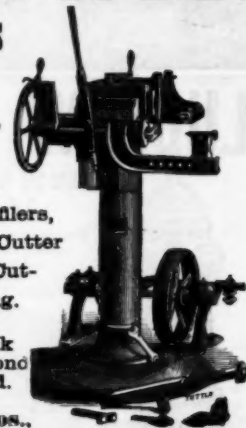


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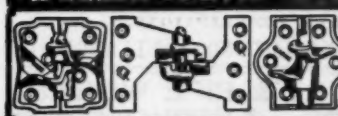
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